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THE PALESTINE EXPLORATION FUND.

THE YEAR 1889.

Although no expedition for exploring or excavating has been organised during the past year, a great deal of useful work has been accomplished, and a distinct advance has been made in our knowledge respecting several very interesting topics of enquiry.

1. The clearance work at the Pool of Bethesda having been proceeded with, Herr Schick has been able to supply further important information. The discovery of a fresco on the wall of the crypt of the church over the Pool, representing an angel troubling the water, is of great value as proving conclusively that in crusading times the spot was regarded as the site of Bethesda.

2. Further portions of the ancient wall of Jerusalem have been exposed on the northern side and at the north-western corner.

3. A very large cistern has been discovered near the church of the Holy Sepulchre, apparently under the spot where the mediæval church of Santa Maria Latina stood; and outside the Damascus Gate, between the city wall and the hill in which "Jeremiah's Grotto" is situated, two ancient cisterns, one of which is believed by Herr Schick to be of Canaanite origin, have been found.

4. The remains of a church have been discovered in the street of Sitti Maryam, opposite the barracks, and close to the chapel of the Flagellation.

5. An extremely interesting subterranean rock-hewn church has been found at the village of Silwân. From a Greek inscription in the apse it appears to have been dedicated to the memory of the prophet Isaiah. Indications of another rock-hewn church have been seen and described by Mr. Schumacher near Athlît.

6. Excavations on the Dominican property north of Damascus Gate have brought to light certain remains which are believed to indicate the former existence of a large church near that discovered in this locality a few years ago. Herr Schick suggests that it may be the original church of St. Stephen. It will be remembered that the church built by the Empress Eudocia in the years 439–60, was so large that in 518 A.D. St. Sabbas and his numerous disciples assembled in it, "the cathedral church of the Resurrection being incapable of receiving so vast a multitude." It is said to have been capable of holding 10,000 people. An account by Sir Charles Wilson of the various churches of St. Stephen will be found in an

Appendix to the Pilgrim's Text Society's translation of the Abbot Daniel. In the same neighbourhood tombs with *rolling stone doors* were found, also some Greek inscriptions.

7. Excavations on property belonging to a French gentleman on the eastern slope of Zion have revealed a number of rock-hewn chambers, which appear to have been used in ancient times partly as dwellings and partly as storehouses. In describing them Herr Schick remarks that nearly all the ground covered by the city of Jerusalem is found on examination to be honeycombed with these rock-hewn chambers. It is not improbable that the Jebusites were to some extent troglodytes. In the Apocryphal Acts of the Apostles mention is made of a cave at Cyprus "where the race of the Jebusites formerly dwelt."

8. On the Mount of Olives very interesting discoveries have been made, including a Christian burial place, an extensive series of "catacombs," which had been made use of by Roman soldiers of the tenth legion, a number of Roman tiles, and other antiquities of various periods.

9. In a cave at Sarîs have been found human figures sculptured on the walls, resembling the "Proto-Phœnician" rock-sculptures near Tyre, and an inscription, believed by Professor Sayce to be evidently old Phœnician. An inscription which had escaped the observation of previous travellers has been noted by Mr. Hanauer at Beit el Khûlîl.

10. From Galilee Herr Schumacher has reported the discovery of a large cave at Nazareth; ancient and elaborate rock tombs at Haifa and Shefa 'Amr; exploration of the caves of Jessâs; discovery of various inscriptions, and of the rock-hewn apse of a church alluded to above.

11. The meteorological observations made under the auspices of the Fund which extend over many years are still being carried on, and the results are being published by Mr. Glaisher in successive numbers of the *Quarterly Statement*.

NOTES AND NEWS.

The Rev. J. Fallscher, of Nâblus, has forwarded drawings of several sculptured capitals and other stones found at Sebŭstieh (Samaria) by M. Ali, the Government engineer there. One of these bears a bull's head with horns, and two others have human figures. They are apparently of Christian origin.

Herr Schick reports the discovery of an obelisk at Cæsarea and sends a drawing of it, which is given at p. 23. The top of the obelisk has not been found. It is believed that this is the first obelisk ever discovered in the Holy Land.

The present number contains an account of further observations of the rock levels of the city of Jerusalem confirming the supposition that east of the Church of the Holy Sepulchre there is a rock terrace surrounded, or nearly surrounded, by scarps of considerable height.

A letter from Jerusalem, published in the *Northern Christian Advocate*, Syracuse, New York, November 7th, 1889, has the following:—"There are strange rumours afloat about an inscription found at St. Stephens (north of Damascus Gate). It is said that the Romanists are anxious to hush up the discovery, as it would damage the credit of the Church of the Sepulchre. A person who professes to have seen and read it informs me that its contents are somewhat to the following effect: 'I, Eusebius, have desired to be buried in this spot, which I believe to be close to the place where the body of my Lord lay.'" Herr Schick has been asked to report to the Fund what he knows of this curious story.

The *Figaro* of October 22nd has an interesting and suggestive article headed "The Russians in Palestine." "Russia," it states, "proceeds in a manner peculiar to herself; she labours without noise, but this does not prevent her making great advances. Other nations who desire to extend their influence in Palestine proceed with the sound of the trumpet, and achieve only a minimum of success. Russia labours in silence, and obtains surprising results. It seems that Russians have undertaken to *Russify* Palestine, and they are doing it. Money does not fail her. There exists in Russia a great society bearing the title of "the Orthodox Society of Palestine," which supplies the Russian missionaries with the funds necessary for the creation and support of educational and benevolent establishments. The Panslavist Committees, and rich private individuals, also come to the aid of this politico-religious campaign, and the Russian pilgrims, who stream by thousands every year to Jerusalem, contribute morally and materially to the success of the work."

"At Nazareth there are two Russian schools for boys and one for girls. These schools, although founded only three years ago, already number more than five hundred pupils. At Beyrût a school for girls was established in 1887. Two hundred young women there receive Russian instruction. The schools of Beit Jâla, and many other localities, work to the satisfaction of their founders, and reckon from 80 to 100 pupils each. At Nazareth, and in other towns, there are hospitals and dispensaries. At Jerusalem and in its environs Russian establishments may be counted by the dozen. A million has been expended in the construction of two large hospices, where pilgrims from Russia may be cheaply supplied with all the comforts possible. It is easy to conceive that all this money spent in the country benefits the population and attaches it more and more to the Russian cause."

"We ought to note," the writer continues, "that the instruction given in the schools is absolutely *Russian*. Only Arabic and Russian are taught; every other language is rigorously excluded. Thus in a few years the Arabs will know nothing but what their Russian instructors have taught them, and will be impregnated only with Russian ideas! A congress of Russian professors recently met at Jerusalem 'to discuss and adopt a uniform system of instruction in Russian schools in Palestine, and to suggest measures for promoting and confirming Russian influence in the country.' The Czarewitch was present officially."

"A relation of a voyage to Tadmor begun y^e^ 29th Sept., 1691," from the original manuscript in the possession of Albert Hartshorne, Esq., F.S.A., and presented by him to the Fund, will shortly be published.

An important essay by Frederick J. Bliss, Esq., B.A., of Beyrût, on Ma'lula and its dialect, will be published in the *Quarterly Statement* during the year. Ma'lula lies north-east of Damascus. The author of the paper remarks that:—"Its situation and surrounding scenery are unique. Its cave-dwellings and rock-tombs give evidence of an ancient but active existence, while in its dialect is found a certain strange survival of the Aramaic which Christ spoke not 150 miles away."

Mr. Henry A. Harper's work, on "The Bible and Modern Discoveries" was published in December. It is an endeavour to present in a simple but yet connected form the Biblical results of twenty-two years' work of the Palestine Exploration Fund. The writer has also availed himself of the discoveries made by the American Expeditions and the Egyptian Exploration Fund, as well as discoveries of interest made by independent travellers. The Bible story, from the call of Abraham to the Captivity, is taken, and details given of the light thrown by modern research on the sacred annals. Eastern customs and modes of thought are explained whenever the writer thought they illustrated the text. To the Clergy and Sunday School Teachers, as well as to all those who love the Bible, the writer hopes this work will prove useful. He is personally acquainted with the land, and nearly all the places spoken of he has visited, and most of them he has moreover sketched or painted. The work is in one large, handsome volume of 600 pages. It is illustrated with many plates, and a map showing the route of the Israelites and the sites of the principal places mentioned in the sacred narratives. Price to the public, 16*s.*; to subscribers to the Palestine Exploration Fund, 10*s.* 6*d.*, carriage included.

The work has had so far a very gratifying reception. The whole of the First Edition has gone, and a considerable number of the Second Edition were ordered before it could be got ready. This is the more satisfactory as hardly any press notices have yet been received. The number of subscribers to the Palestine Exploration Fund who have taken advantage of the reduced terms has been about 500. It should be noted that the book is admirably adapted for the school or village library.

Mr. Guy le Strange's important work, "Palestine under the Moslems," which is a description of Palestine according to the mediæval Arab geographers, is also in the press.

The report of Herr Schumacher's Survey of Northern 'Ajlûn will shortly be published in separate form. It contains a map, plans and drawings of the important ruins of Gadara (Umm Keis), Capitolias (Beit Ras), and Arbela (Irbid), none of which had ever before been surveyed, also of the Temple at el-Kabu and numerous tombs, sarcophagi, inscriptions, dolmens, &c. The price to the public will be 3*s.* 6*d.*, to subscribers to the Fund, 1*s.* 6*d.*

The first volume of the "Survey of Eastern Palestine," by Major Conder, has been issued to subscribers. It is accompanied by a map of the portion of country surveyed, special plans, and upwards of 350 drawings of ruins, tombs, dolmens, stone circles, inscriptions, &c. The edition is limited to 500. The first 250 subscribers pay seven guineas for the three volumes, with an index; subscribers to the "Survey of Western Palestine" are privileged to have the volumes for this sum. The price will be raised, after 250 names are received, to twelve guineas. The Committee *are pledged never to let any copies be subscribed under the sum of seven guineas.* Mr. A. P. Watt, 2, Paternoster Square, is the Sole Agent. The attention of intending subscribers is directed to the announcement on the inside of the cover of this number.

Considerable progress has also been made with the second volume, which consists of M. Lecomte's beautiful drawings, illustrating the Mission of M. Clermont-Ganneau in 1874. The illustrations for the third volume, Mr. Chichester Hart's "Flora and Fauna" of the Wâdy Arabah, are nearly ready.

The Committee have added to their list of publications the new edition of the "History of Jerusalem," by Walter Besant and E. H. Palmer (Bentley & Son). It can be obtained by subscribers, carriage paid, for 5*s.* 6*d.*, by application to the Head Office only. The "History of Jerusalem," which was originally published in 1871, and has long been completely out of print, covers a period and is compiled from materials not included in any other work, though some of the contents have been plundered by later works on the same subject. It begins with the siege by Titus and continues to the fourteenth century, including the Early Christian period, the Moslem invasion, the Mediæval pilgrims, the Mohammedan pilgrims, the Crusades, the Latin Kingdom, the victorious career of Saladin, the Crusade of Children, and many other little-known episodes in the history of the city and the country.

The books now contained in the Society's publications comprise an amount of information on Palestine, and on the researches conducted in the country, which can be found in no other publications. It must never be forgotten that no single traveller, however well equipped by previous knowledge, can compete with a scientific body of explorers, instructed in the periods required, and provided with all the instruments necessary for carrying out their work. The books are the following (*the whole set can be obtained by application to Mr. George Armstrong, for* 37*s.* 6*d.*, *carriage paid*):—

By Major Conder, R.E.—

(1) "Tent Work in Palestine."—A popular account of the survey of Western Palestine, freely illustrated by drawings made by the author himself. This is not a dry record of the sepulchres, or a descriptive catalogue of

ruins, springs, and valleys, but a continuous narrative full of observations upon the manners and customs of the people, the Biblical associations of the sites, the Holy City and its memories, and is based upon a six years' experience in the country itself. No other modern traveller has enjoyed the same advantages as Major Conder, or has used his opportunities to better purpose.

(2) "Heth and Moab."—Under this title Major Conder provides a narrative, as bright and as full of interest as "Tent Work," of the expedition for the *Survey of Eastern Palestine*. How the party began by a flying visit to North Syria, in order to discover the Holy City—Kadesh—of the children of Heth; how they fared across the Jordan, and what discoveries they made there, will be found in this volume.

(3) Major Conder's "Syrian Stone Lore."—This volume, the least known of Major Conder's works, is, perhaps, the most valuable. It attempts a task never before approached—the reconstruction of Palestine from its monuments. It shows what we should know of Syria if there were no Bible, and it illustrates the Bible from the monuments.

(4) Major Conder's "Altaic Inscriptions."—This book is an attempt to read the Hittite Inscriptions. The author has seen no reason to change his views since the publication of the work.

(5) Professor Hull's "Mount Seir."—This is a popular account of the Geological Expedition conducted by Professor Hull for the Committee of the Palestine Fund. The part which deals with the Valley of Arabah will be found entirely new and interesting.

(6) Herr Schumacher's "Across the Jordan."

(7) Herr Schumacher's "Jaulân."—These two books must be taken in continuation of Major Conder's works issued as instalments of the unpublished "Survey of Eastern Palestine." They are full of drawings, sketches, and plans, and contain many valuable remarks upon manners and customs.

(8) "The Memoirs of Twenty-one Years' Work."—A copy of this book is presented to every subscriber to the Fund who applies for it. The work is a popular account of the researches conducted by the Society during the past twenty-one years of its existence. It will be found not only valuable in itself as an interesting work, but also as a book of reference, and especially useful in order to show what has been doing, and is still doing, by this Society.

(9) Herr Schumacher's "Kh. Fahil." The ancient Pella, the first retreat of the Christians; with map and illustrations.

(10) Names and Places in the Old and New Testament and Apocrypha, with their modern identifications, with reference to Josephus, the Memoirs, and *Quarterly Statements*.

(11) Besant and Palmer's "History of Jerusalem," already described.

Branch Associations of the Bible Society, all Sunday Schools in union with the Sunday School Institute, the Sunday School Union, and the Wesleyan Sunday School Institute, will please observe that by a special Resolution of the Committee they will henceforth be treated as subscribers and be allowed to purchase the books and maps (by application only to the Secretary) at reduced price.

The income of the Society, from September 19th to December 19th inclusive, was—from subscriptions and donations, £426 15*s.* 10*d.*; from all sources, £653 19*s.* 4*d.* The expenditure during the same period was £740 5*s.* 1*d.* On December 21st, the balance in the Bank was £369 2*s.* 1*d.*

Subscribers are begged to note that the following can be had by application to the office, at 1*s.* each:—

1. Index to the *Quarterly Statement*, 1869–1880;
2. Cases for Herr Schumacher's "Jaulân;"
3. Cases for the *Quarterly Statement*, in green or chocolate.

Early numbers of the *Quarterly Statement* are very rare. In order to make up complete sets, the Committee will be very glad to receive any of the following numbers:—

No. II, 1869; No. VII, 1870; No. III (July) 1871; January and April, 1872; January, 1883, and January, 1886.

It having again been reported to the Committee that certain book hawkers are representing themselves as agents of the Society, the Committee have to caution subscribers and the public that they have no book hawkers in their employ, and that none of their works are sold by itinerant agents.

While desiring to give every publicity to proposed identifications and other theories advanced by officers of the Fund and contributors to the pages of the *Quarterly Statement*, the Committee wish it to be distinctly understood that by publishing them in the *Quarterly Statement* they neither sanction nor adopt them.

Subscribers who do not receive the *Quarterly Statement* regularly are asked to send a note to the Secretary. Great care is taken to forward each number to all who are entitled to receive it, but changes of address and other causes give rise occasionally to omissions.

The only authorised lecturers for the Society are—

(1) Mr. George St. Clair, F.G.S., Member of the Anthropological Institute and of the Society of Biblical Archæology.

His subjects are :—

(1) *The Buried City of Jerusalem, and General Exploration of Palestine.*
(2) *Discoveries in Assyria, Chaldea, and Palestine.*
(3) *The Moabite Stone and the Pedigree of the English Alphabet.*
(4) *Jerusalem of David, Nehemiah, and Christ.*
(5) *Sight-seeing in Palestine: a Narrative of Personal Experiences.*
(6) *Israel's Wars and Worship, illustrated by the new Survey.*
(7) *The Gospel History in the light of Palestine Exploration.*

Address: Geo. St. Clair, Bristol Road, Birmingham, or at the Office of the Fund.

(2) The Rev. Henry Geary, Vicar of St. Thomas's, Portman Square. His lectures are on the following subjects, and all illustrated by original photographs shown as "dissolving views:"—

The Survey of Western Palestine, as illustrating Bible History.
Palestine East of the Jordan.
The Jerusalem Excavations.
A Restoration of Ancient Jerusalem.

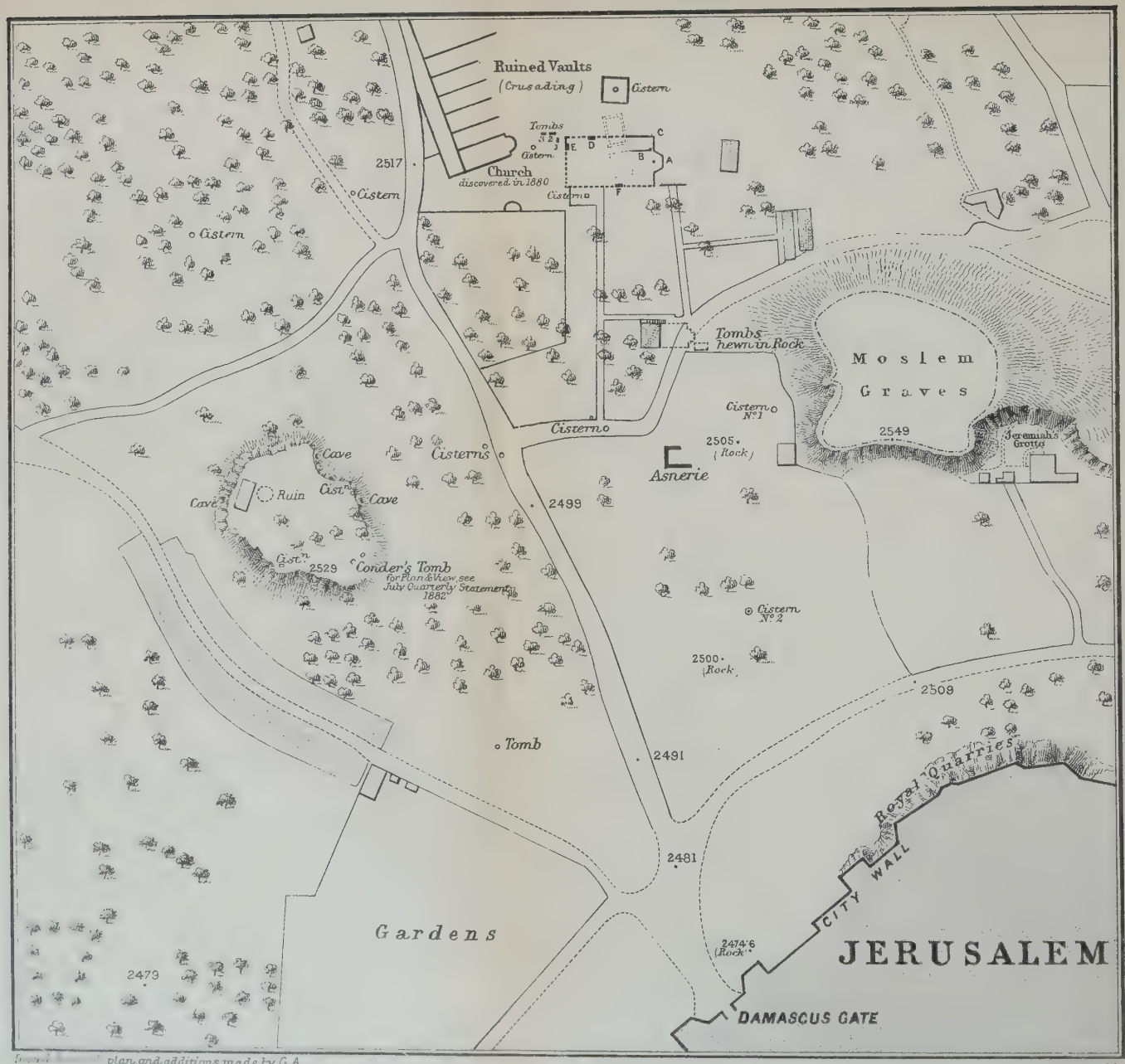
(3) The Rev. James King, Vicar of St. Mary's, Berwick. His subjects are as follows :—

The Survey of Western Palestine.
Jerusalem.
The Hittites.
The Moabite Stone and other monuments.

(4) The Rev. Thomas Harrison, F.R.G.S., Member of the Society of Biblical Archæology, 38, Melrose Gardens, West Kensington Park, W. His subjects are as follows :—

(1) *Research and Discovery in the Holy Land.*
(2) *In the Track of the Israelites from Egypt to Canaan.*
(3) *Bible Scenes in the Light of Modern Science.*

PLAN SHEWING POSITION OF THE TWO CHURCHES N.OF DAMASCUS GATE.



DISCOVERIES NORTH OF DAMASCUS GATE.

Some time ago Mr. Schick reported a further examination of the Dominican ground north-west of Jeremiah's Grotto, and believes that indications of a second church—older, and also larger, than that previously known—have been discovered. He wrote : " The diameter of the pieces of the shaft of a column, which were found built into the wall of the pool formerly described (*Quarterly Statement*, 1889, p. 116), is considerably over 4 feet. They may have once stood on the pedestal now standing in the centre of what I consider to be the apse of a former church (*see* Plan, A). This pedestal is formed of one stone of hard 'mizzeh,' roughly dressed, and was certainly intended to be under the flooring of the church and not seen. It is probably *in situ*, as the measurements from its centre in all directions indicate. Round this pedestal, especially towards the east, many good hewn stones were lying ; westward, on a higher level, some Crusading masonry was found, especially a strong wall running north and south, resting on the rock of the eastern side of the pool. North of it was a kind of thin wall of polished stones, forming two steps (B) ; and further to the north, on a lower level, a flooring of well executed mosaic, forming geometrical figures in different colours, but with no inscriptions or figures of plants or animals. The shaft of a pillar of white marble, a foot in diameter, was also found here, and the pedestal of masonry on which it had once stood. Still farther in the same direction, 16 feet from the long steps and parallel with them, is a rock scarp (C). As this scarp is exactly in a line with the Byzantine remains—namely, a pedestal and threshold—shown on the plan (D) it is clear that these once formed part of the northern wall of a large church. Further west, a Byzantine threshold of a door (E) is situated exactly at a right angle to the said wall, and appears to have been a door in the western wall of the church. To the south of the pool, and of a Crusading wall which exists there, a kind of Byzantine threshold (F) was found, situated exactly parallel with the long steps and the northern wall of the church, and this appears to have been a point in the southern wall. As further east there is mosaic in the flooring and a piece of thick plaster standing at right angles to this threshold, and as to the north of it similar plaster, about three-quarters of an inch thick and 4 or 5 feet high, was found standing in the rubbish (the stones on which it had rested having been taken away), and forming a line as shown on the plan (A), it is quite clear we have the *apse of a Byzantine church*. The impression of the stones can still be seen on the plaster, by which it appears that the plaster had been put on the outside of the wall, probably with the object of preventing wet coming through, the ground outside being higher than the flooring of the church. It seems that the walls of this church were only 3 feet thick, so that it must have been covered with a wooden roof, and not arched. Further clearance of the ground may bring more to light. At present we may conclude that there was here a *basilica*, with a

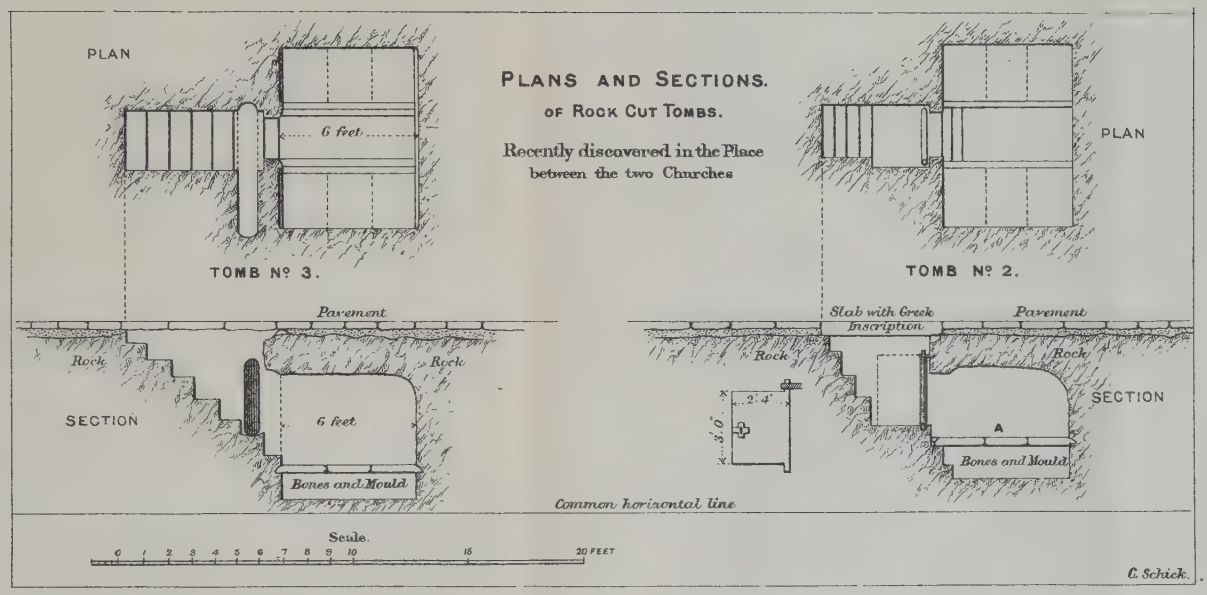
wide nave and narrow side aisles. The monks hope one day to find *the tomb of St. Stephen*, but hitherto nothing of the kind has been discovered.

"It appears to me quite clear that the rock cuttings (*Quarterly Statement*, 1889, p. 116) are the oldest work, and belong to the Jewish period; that in the Byzantine period the pool, &c., were filled up and a church built, about 130 feet long by 73 feet wide, outside measurement, very nearly the same size as the Church of St. Anne; that this original St. Stephen's Church was destroyed by the Mohammedans, and that subsequently, when the Crusaders came into possession of the place, they used the stones for their new buildings, and erected the smaller church which was found some years ago and described in the Jerusalem Volume of the Survey. As there are mosaic pavements in the eastern part of the two side aisles of the church last discovered, and (on the northern side) two steps go up to the nave, it is clear that the flooring of the latter, at least at the eastern end, was on a higher level than the rest of the church. Perhaps under it St. Stephen's tomb may be found."

In a subsequent letter Mr. Schick reported that "without entirely clearing the site of the church, the ground had been converted into a garden. In the church they found the places where the pillars had stood, always a large square stone, but nothing else of much interest," and at a later date he wrote as follows:—

"Having been told that the Dominicans are going on with the work on their property I went there, and they willingly showed me everything. All the earth and remains of Crusading buildings are now removed, and the rock and the flooring of the former Church laid bare. Only in two places one may see that once a pillar stood there—so it seems the church had not many pillars. They found some pieces of hewn stone, and two more rock-hewn tombs, similar to those discovered several years ago. In the pavement was a very large flag-stone, with a Greek inscription. Whilst being raised it fell into many pieces, which they put together again so that the inscription could be copied. I could not myself copy it as they keep the stone in a dark place. They, however, have copied and will soon publish it.

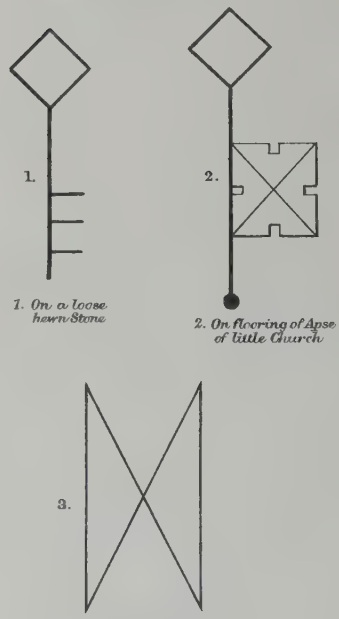
"Under the large slab there were steps, and a perpendicular stone door, which can still be turned on its pivots (*see* Drawing, Tomb No. 2); below, the pivot goes in a hole cut in the rock; on the top it is kept by an iron ring fastened to the rock; it can easily be shut and opened, as it is only 4 inches thick, 3 feet long, and 2 feet 4 inches wide. When opened it can be laid back in a recess cut in the rock, so that the door is flush with the rock-wall of the entrance at the steps. Four high steps lead down to it. The door had formerly an iron lock, cruciform in shape, but this has rusted away, together with the nails by which it was fixed. The keyhole in the stone is well preserved. Just over the door is a Greek inscription, cut in the rock, of which I give a copy. A person entering through the opening (when the door is open and put back into the recess) has to go three steps more downwards, and



MASONS MARKS.

HALF REAL SIZE.

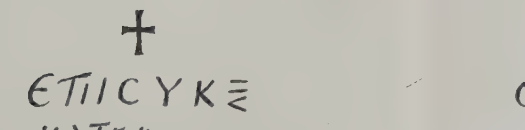
Found in the little Church.



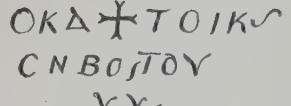
1. On a loose hewn Stone

2. On flooring of Apse of little Church

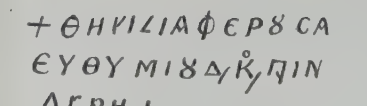
3. On Wall of rooms at little Church.



Inscription on one of the Covering Slabs at A in Tomb Nº 2.



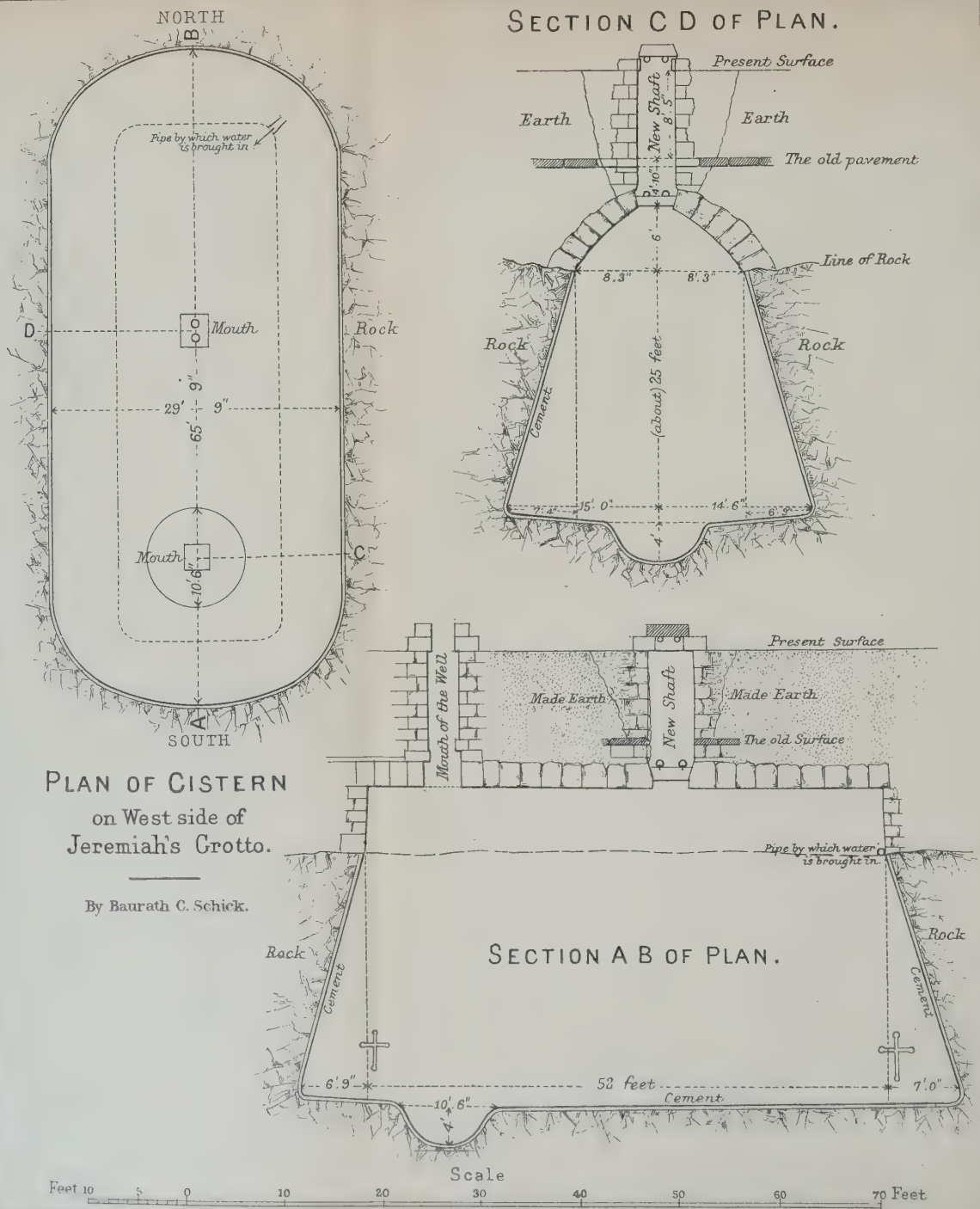
Inscription on the Rock over the Entrance to Tomb Nº 2 which has a Stone Door.



Inscription found in the Caves of the many tombs partly under the road which leads up to the top of the Hill above Jeremiah's Grotto.

N.B. This Inscription, the Monks told me is already published.

F. S. Weller, lith



PLAN OF CISTERN

on West side of
Jeremiah's Grotto.

By Baurath C. Schick.

then comes into a kind of passage or empty place less than 6 feet high, to the right and left of which are *loculi*, in which are bones and mould. Each *loculus* was covered with three slabs, nicely smoothed, on one of which is an inscription, which I copied (*see* Drawing), but the Monks removed all the slabs, liking to see the mould and bones.

"A little west of this tomb was found a similar one, but without any inscription, and instead of a door it had *a round stone to be rolled before the opening* (*see* Drawing, Tomb No. 3). It was like that at the Tombs of the Kings, only this stone was somewhat thinner and smaller. The stone was not in its place, but in the rock a narrow and long recess is excavated, into which the stone might be rolled, and so the tomb opened. The adjoining drawings will explain all this ; and the exact situation of these newly discovered tombs may be seen on the plan marked 1, 2, 3.

"I give a drawing of three masons' marks, of forms new to me, found at the place.

"The stone forming the well-mouth of the cistern in the yard east of the little church, and south of the recently discovered rock-cut tombs, is octagonal externally, and a curious feature of it is that on four of the eight sides, half-way up, there is a step, on which one might put his foot when drawing water. I think it was originally not intended for a well-mouth, but for a baptismal font. Short people, as boys, might, at this solemn act, have stood on this kind of step. I have never seen anything of the kind before."

C. SCHICK.

TWO CISTERNS NEAR JEREMIAH'S GROTTO.

I HAD the opportunity of examining two cisterns near Jeremiah's Grotto, and found both interesting. The situation of these cisterns is shown on the tracing from the Ordnance Survey Plan of Jerusalem $\frac{1}{2500}$ (p. 9), where they are marked 1 and 2.

No. 1 (*see* Plan) is rather a large cistern, the greater part cut in the rock, with its four sides inclining, not perpendicular, so that the space which had to be arched over is much smaller than the bottom of the cistern. The roof is not rock, but a curious tunnel arching, very much pointed, and with sides nearly straight, made of hewn stones. The present surface of the ground is, according to the Ordnance Survey, about 2,515 feet above the sea. The former surface is shown in the shaft of the mouth of this cistern to be 10 feet lower, or 2,505 feet. As the cistern is about 45 feet deep, its bottom is therefore 2,460 feet above the sea. It is damaged and requires some new cementing. The last repairs were done by Christians, as there are on the eastern side, some feet above the bottom, and near both ends, crosses 4 feet 6 inches high and 3 feet wide, made in plaster, of the form shown in the section. In the bottom there is, just under the mouth, a round bowl-shaped pit, 4 feet deep and 10 feet 6 inches in diameter. The cistern is covered with a pavement of

large flagstones. Fourteen feet north of the mouth is a second one, covered with a large stone, having two iron rings on its upper surface; but this mouth had no shaft up to the present surface of the ground. That represented in the drawing has been made recently. The cistern is 65 feet 9 inches long in the middle at the bottom, and 29 feet 6 inches wide; it has rounded corners. It may take water up to 25 feet, a quantity equal to about 20,000 skins.

Its northern end comes to within a few feet of the rock scarp, in which are rock-cut tombs, thought by General Gordon to be the Sepulchre of Christ. This remarkable cistern is certainly not of Mohammedan or Christian origin, but apparently Canaanitic, its form being like so many made by Canaanites in the rock; but I have never before seen one so large. The arching and the slab with two iron rings is very likely Crusading.

Cistern No. 2 is 250 feet south of the former, towards the Damascus Gate. It is very much smaller than the former, but may contain 3,000 skins of water. It is entirely hewn in the rock, and before it was made into a cistern was rock-cut Jewish tombs. In the rock ceiling is a square, 13 feet by 13 feet, very nicely worked, with a kind of cornice round it, exactly as in the Tombs of the Kings. The floor below this is smooth, but the rest of the flooring is rough, just as it was left when the tombs were broken away to get more room. As it is plastered all round, the door to the former square chamber cannot be ascertained, but it is supposed to have been in the north-western wall. For the same reason it cannot be ascertained whether the pillar or support is of living rock or masonry. Near it the rock at the bottom is left rough, and now forms two long steps. The mouth is over a kind of recess, and goes up through the rock, over which a square shaft is built. The cistern is nearly square, about 24 feet in each direction, and has an average height of 15 feet. The ceiling is very uneven, except that of the former tomb-chamber.

There was an idea that between the present town wall and the scarp of Jeremiah's Grotto on the north, there was nothing else than a quarry; but this cistern proves that there were rock-cut tombs, as in the Jeremiah's Grotto hill itself. In regard to the rock levels I will add that recently in digging outside the Damascus Gate, 26 feet north of the north-east corner of the eastern tower of that gate, the rock was found at a level of 2,474½ feet; 6 feet 2 inches higher than the sill of Damascus Gate.

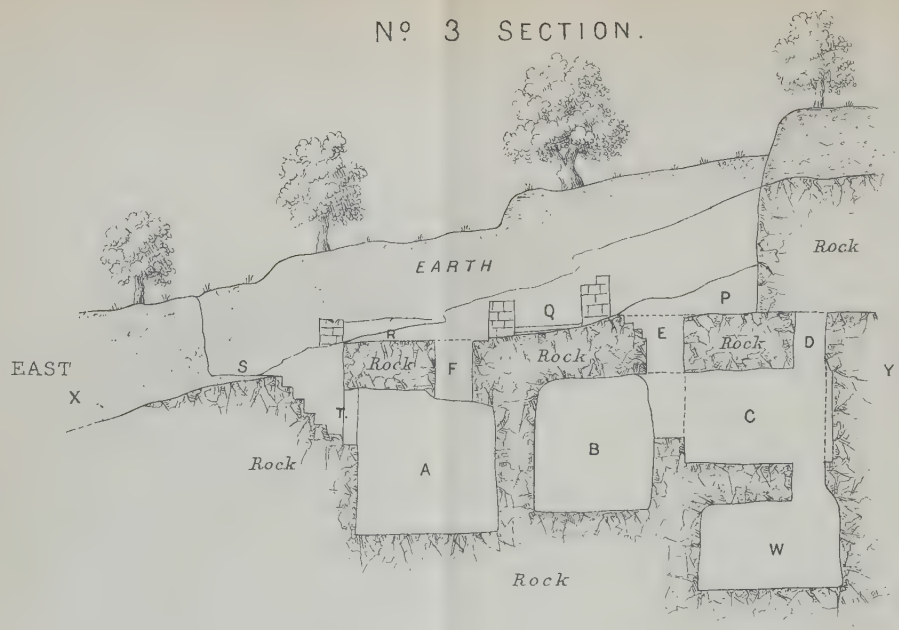
C. SCHICK.

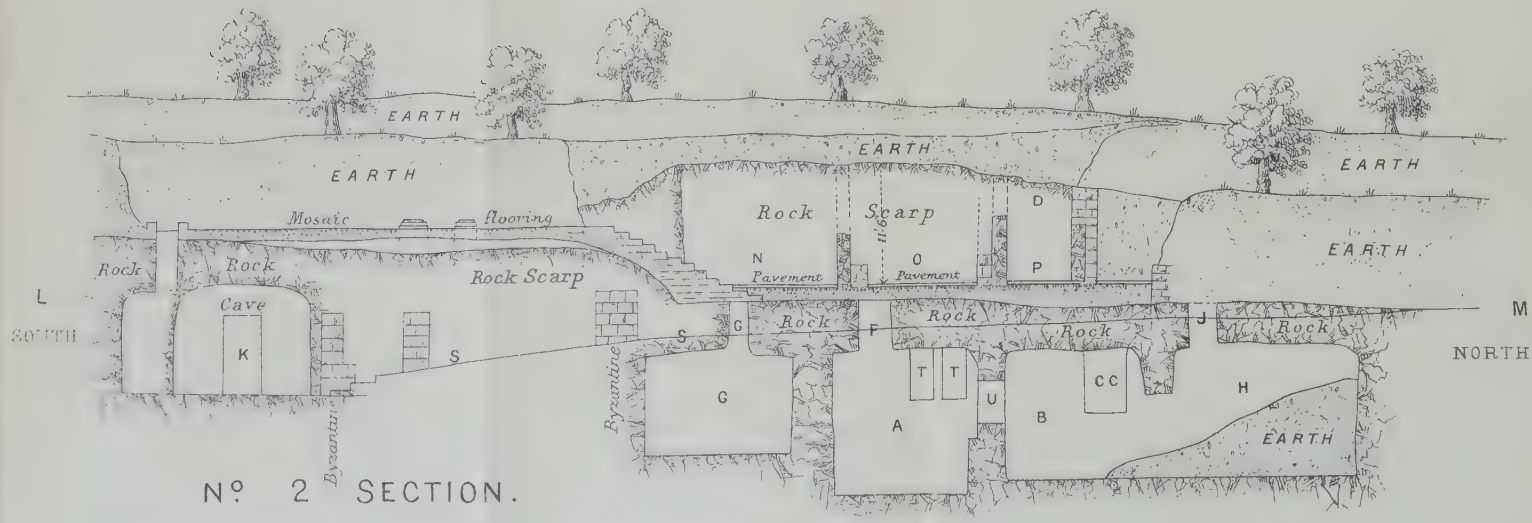
EXCAVATIONS ON THE EASTERN BROW OF "ZION."

A FEW years ago a French gentleman, Count Piello, bought a piece of ground on the eastern slope of the western hill of Jerusalem, generally called Zion, about half way down between the buildings of Neby Dâûd and the Pool of Siloam. A little watch-house was then built, and a

Sections of EXCAVATIONS ON EAST SLOPE OF ZION, immediately North of the Cistern midway between David's Tomb and Pool of Siloam.

See Plan of Jerusalem, April Quarterly Statement 1889.





C. Schick.

F.S.Weller, lith.

black man put in as guardian. About six months ago a priest came and began to excavate there; the work is going on slowly, and many things have been found, of which I will now report.

The overseer of the work, a Roman Catholic monk, speaks English, and must have been once in England. He showed me everything; the owner of the property required that I should give him a copy of any drawings or plans I might make, which I promised to do.

There is first a layer of earth from 5 to 8 feet thick, on which olive trees are growing, then are appearing masonry, rockscarps, well-mouths, and many hewn and sculptured stones; also pavements, mosaics, &c., were found.

I give a plan of walls, caves, cisterns, rockscarps, holes, earth, trees, &c.; also a Section and elevation from north to south (No. 2), and a Section and elevation from west to east (No. 3). In the drawings the same letter (capitals) shows always the same thing. It is found here, as in so many other places, both inside and outside the city, that *there were in ancient times caves and dwellings excavated in the rock*, which excavations were in later times converted into cisterns. Here, as the sections will show, are nearly throughout two stories of excavations; the upper ones certainly were originally used for human dwellings, or as cellars, magazines, stables, &c. The walls are everywhere cut nearly perpendicular, the floorings horizontal, and the top or covering (of rock) has always a thickness of 4 feet, whereas the walls were sometimes rather thinner, and in the upper storey very thin, only 12 inches as shown in Section No. 2. On Ophel, and in the city, I found such rock partition walls also cut thicker, and sometimes there are windows in them as here (T T). Further, there is nearly always a smaller or larger rounded hole in the roofing as here (D E F G J). In February, 1869, Sir Charles Warren found similar caves 200 feet south of the Triple Gate, and I am fully convinced that wherever one will dig deep enough in the ground formerly occupied by ancient Jerusalem, he will find such excavations. These newly-discovered ones I will now describe more fully.

The monks first made a trench or kind of road from south towards north, and from it branches eastwards towards the hillside, and they found the following:—In the south (or to the left-hand of the Section No. 2, a cave (K) entirely hewn in the rock, with an opening towards the east, 8 feet wide and 9 feet high, so that people could go in from the court (or rather what was at that time the road or street of the city) on level ground. This was a cave to be inhabited, as it is now again. Inside there is a round niche towards the south, with a round opening in the roof; this, I think, had been originally a round cistern, and in later time the thin rock wall between it and the cave was broken away. Opposite this cave (K) are found two similar holes, from which the earth has not been removed. In the large opening is now put a new wall with a door, and the overseer uses the place to keep things; it is also his office and dining-room. If one goes now from the front of the cave northwards, there is a thin wall, of very inferior workmanship, but towards the west the remains are higher and better, and, as it seems to

me, Byzantine. After 5 feet one has to cross another and a stronger wall, which stands at right angles to a wall put up in front of a rock-scarp, going from south towards north, and so covering the rock face for 24 feet, and forming a terrace about 12 feet high. On this terrace, which is horizontal and smooth, is a large piece of mosaic flooring ; west of it are three basements of pillars, the largest one *in situ*. Whether the two others are *in situ* or not I cannot speak positively. From this terrace a flight of steps leads northward 7 feet down to a level flooring in which are two round openings (G and F) like well-mouths ; the cave (G) is still full of earth, but (A) is cleared out so that I could measure it ; but before going down we will first examine what is above. West of this flooring (R, No. 3) a wall runs from south towards north, 1 foot 10 inches thick. This wall had a few doors which led westwards to another flooring a little more elevated (Q), with a good pavement. Toward the west is another and thicker wall. This flooring (Q) is only 6 feet wide, and was once the corridor or passage between rooms on the east and west. On the west two of these rooms are preserved (N and O, No. 2). Their west wall was a rock scarp, which also extended further south, and between them there was originally a thin rock wall, which afterwards was strengthened by adding masonry to it, as shown in Section No. 2.

The flooring is also rock, and in it (in O) is a large oval-shaped hole (E), with some steps in it downward hewn in the rock. North of these two rooms the earth has not been cleared away enough, and I could only see a recess with a hole on the bottom ; but eastward, where the place has been more cleared, there are the traces of a room (R) made of masonry, the flooring of which is on a level with the trench or road. A little to the south one comes to a flight of steps hewn in the rock, going down westwards to a couple of windows (TT). The wall between is also rock, and the narrower window to the right hand had evidently been used as a door, as it has a further step which the other has not. A little lower, I think, was once a flooring of wood, and so a habitable room, and under it a magazine ; from this supposed flooring a door (U) went northwards into other chambers (BH). A wall of masonry, which is still standing, was very likely put in when the rooms over it were built ; also towards the south between the rock walls, there is masonry, and in it a square window (CC) forms an opening to another excavation (C) under the room (O), which has on its further side a hole leading down into a cistern (W) (*see* Section No. 3). From (B) an opening northward, leads to a long cave (H), which is not yet fully cleared out, but has two round holes (J) in the roofing—one the light-and-airhole for the cave, the other, very likely, is over the mouth of a well or cistern situated under the cave (H). All this will be found out later on.

The height of these caves can be seen from the sections ; it is from 8 feet to 12 feet 6 inches. If some were originally intended for dwellings, stables, magazines, or cellars, in later times, when walled houses were erected over them, they were converted into cisterns, especially, as it seems, in the period when Jerusalem became a Christian city, as

there are many crosses found. In the hole (F), for instance, are three crosses hewn in the rock—one towards the south, one towards the north, and one towards the west. The latter is a double one, thus ‡. On the east side there is none. That the chambers were used at this period for cisterns is proved by the cement, which in many places is still firm. If all the rubbish, buildings, &c., could be removed wherever the old city extended, the site would then present a marvellous appearance; all would appear honey-combed, so that one would need great care in walking about not to fall down through a hole or over a scarp.

It is not yet seen what the monks intend to erect here, but certainly some sanctuary in commemoration of some event in the life of our Lord or his Apostles. As far as I understand, they were in hopes of finding the traces of a church once erected over the spot where Peter wept bitterly (Matt. xxvi. 75). When the mosaic and the bases of pillars were discovered, they thought they had found what they looked for, but hitherto no proof of there having once been a church here has been brought to light. To me it seems as if the Crusaders have not done much here, but that the ruins are Jewish, and from the earliest Christian time; the caves and excavations are certainly Jewish. South of the ground on which these remains are, and south of the road, a Moslem has a large piece of ground, where he found the same state of things; and I hope in future to get opportunity to examine and measure there also.

We know that in this neighbourhood was a church of St. Peter called "The Cry of the Cock." Bernard, A.D. 865, tells us that this church was towards the east from the Church of Simeon on Mount Zion, at the place of Peter's denial of Christ.

Fifty years later this was repeated, but the word "church" used perhaps meant simply "sanctuary." In 1450 the place was called Galilee. It had a deep cave in the rock, and was 170 paces east of the house of Caiaphas (Neby Dâûd). If one pace is taken to equal 3 feet, this will be 510 feet east of Neby Dâûd, which brings us to a little building on the Ordnance Survey Plan, which I knew very well, but which was taken away within the last ten years, the stones being used for building new houses near Neby Dâûd, but not to the recently excavated place, which is 350 feet further east.

In 1483 the church had almost totally disappeared, only some walls being visible; but the Pilgrims went to a cave, and in the 16th century a high rock with a deep cistern was said to be the place where Peter denied Christ. It was situated about 150 paces from the tower of the town wall, as one went down from Zion into the Kidron Valley, not far from the Dung Gate and the Bethlehem Aqueduct.

In 1674 we are told that the cave was walled up. In later times the real place was lost, and sought for in this neighbourhood, as is the case now, but hitherto not with the desired result. This ancient church may be found some day in this neighbourhood, and I should think a little higher up the hill, nearer the aqueduct.

C. Schick.

DISCOVERY OF ROCK-HEWN CHAPELS AT SILWÂN.

Having heard that in the village of Silwân a church had been discovered and a very remarkable inscription which no one could read, I went down with my assistants and people who could point out the place. The proprietor of the ground showed us the things, but would not allow me to take copies and measurements until after a long talk, in which I pointed out to him that my measuring and reporting on the matter would be to his interest, he said, "Do what you like, but you must know that I do not want plans or drawings, but wish to sell the place, in order to get money with which to build another home." I hear the Russians offered him 60 Napoleons, but he asks 200.

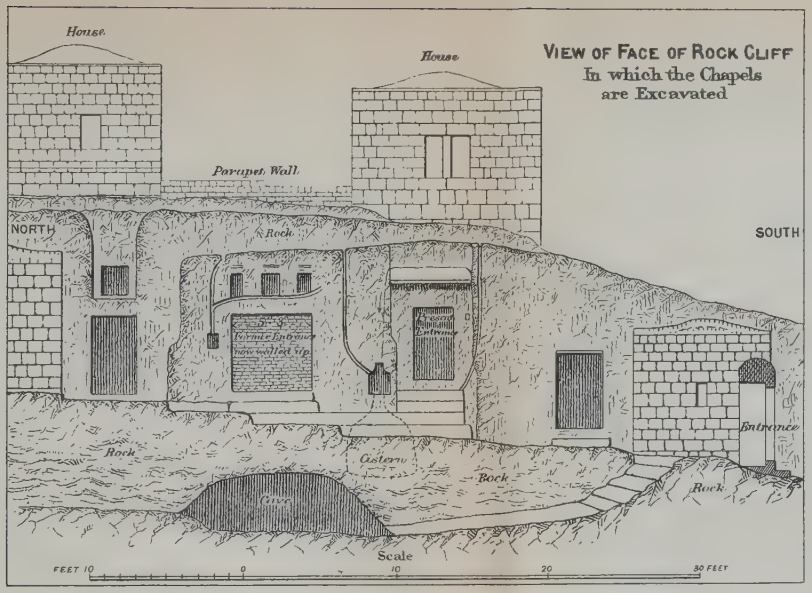
The village of Silwân is divided into two parts, namely, the "upper" and the "lower" village. The place of which I speak is between the two, but belongs to the upper village. It is opposite the Virgin's Well, but somewhat more south, opposite the letter *a* in the word "valley" on the Ordnance Survey Plan of Jerusalem, scale $\frac{1}{2500}$.

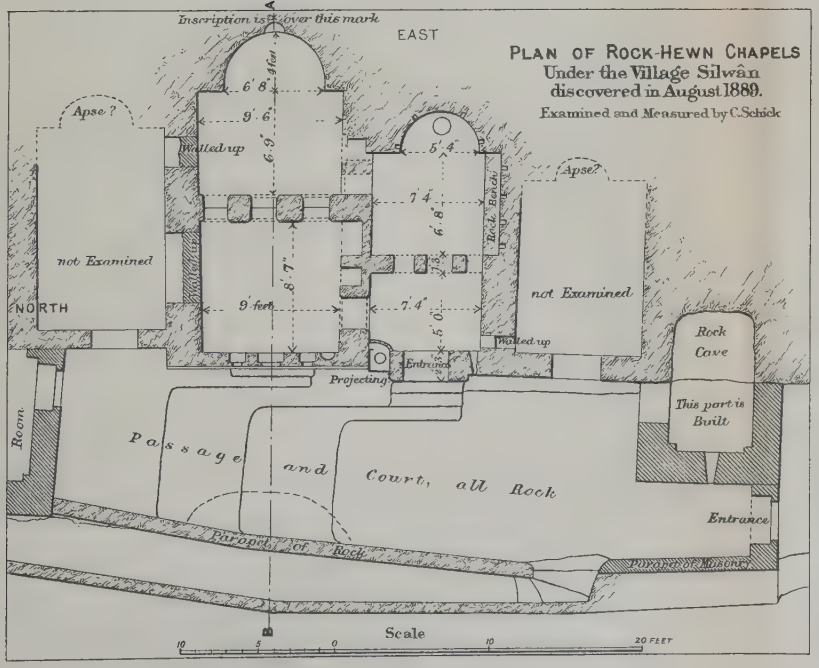
When I visited the place I followed the road in the valley southwards as far as a road which turns at a right angle to the lower village, near the "old pool," and then I had to go northwards up a steep ascent till I came to the spot.

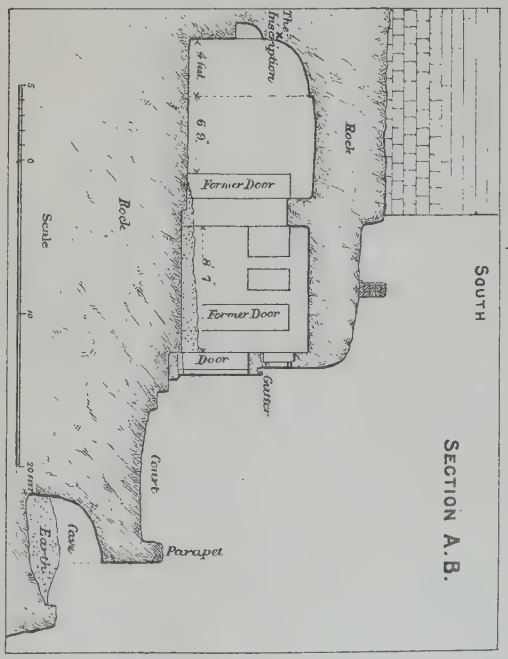
An ordinary door on the south leads into a kind of court, sloping upwards towards the north, formed by a terrace on the rocky side of the hill. The floor, steps, the cliff on the east, and even the parapet on the west are rock. In the face of the cliff are many artificial openings, four doors, and several holes, looking like windows. The large central door is closed by masonry; the northern and southern I found locked up, but that between the central and southern doors was open. Some rock-cut steps lead up to it, and close by there is a round, bottle-shaped cistern cut in the rock. As there was *tibn* in this cistern I could not ascertain its exact size, and accordingly it is shown with dotted lines in the section. On the surface of the cliff I observed several narrow gutters cut in the rock for conducting the rain-water into the cistern.

The present entrance to the chapel is in a projecting part of the cliff, as shown in the Plan, and over the door the rock projects 1 foot more, forming a kind of roof, over which the rain-water is turned aside, so as not to fall into the doorway.

This door leads into a room, 5 feet deep and 7 feet 4 inches wide, very exactly and nicely excavated, with a straight ceiling of rock, the flooring being also rock. The room is nearly 8 feet high. The east wall of this room was originally pierced with three openings, leading into an adjoining room, 7 feet 4 inches wide by 6 feet 8 inches deep, which has along the south wall a rock bench, 1 foot 4 inches high, adapted for sitting on. The north wall was originally pierced by a doorway, the rock sides of which are now broken off. Towards the east there is a regular apse, 5 feet 4 inches wide and 2 feet 8 inches deep, in a half circle, but on the top made like a Mohammedan "mihrab." There are four round





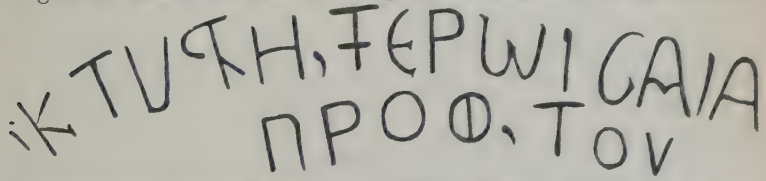


F. S. Weller, lith.

holes in the rock, as if at one time something had been fixed there ; lower down, about 3 feet from the flooring, are again four such holes ; they are round, 2 inches in diameter, and 4 inches deep.

On the south wall, some feet above the stone bench, is a row of similar holes. On the flooring there is a round hole or pit, 13½ inches in diameter, cut down perpendicularly for several feet ; the exact measurement I cannot give, as the hole is filled with earth. I supposed it to be a well-mouth, but the proprietor of the place said that this is not the case. On the top of the apse there had once been a cross made of plaster, but the Moslems have broken it off. This room is also nearly 8 feet high, and the ceiling is exceedingly smooth, exactly hewn, as in the tombs of the Kings.

North of this double room is another and larger double room or chapel. The entrance in the west wall (*see* Drawing), which is now built up, has over it three windows, the middle one somewhat wider than the others ; they are surrounded by rock ledges, so that wooden shutters may exactly close the openings. The outer room is 9 feet wide by 8 feet 7 inches deep. In the south wall were once two cupboard niches, and a door now so much broken away that all is like one room ; on the north was a doorway, 4 feet 8 inches wide, and 5 feet 4 inches high, now closed by masonry. The wall towards the east is pierced by three openings as in the adjoining southern double room. The work is very nicely done, all the edges having a ½-inch draft all round the openings. These openings never had doors. In the middle of the thickness of the wall there is a step in the flooring, so that the floor of the inner room is about 10 inches higher than that of the outer (*see* Plan). The inner room is 9 feet 6 inches wide, and 6 feet 9 inches deep, or 1 foot 8 inches less than the outer room. In the adjoining southern double room the outer was shorter and the inner longer ; here, on the contrary, the outer is longer and the inner shorter, but within 1 inch exactly as long as the southern inner room. This northern inner room has in the walls on the south and north openings or doorways, but that on the north is blocked up with masonry. On the east there is also an apse, much larger than that in the other room, and somewhat more than the half circle, 6 feet 8 inches wide by 4 feet deep (*see* Plan). This apse has also the form of a mihrab, as will be seen in the section. At the height of 3 feet from the floor there is a recess in the rock wall of the apse, about 1 foot deep, 1 foot 4 inches wide, and 1 foot 4 inches high. At its top begins the bow of the roof of the apse, and just there is engraved the



Greek inscription above alluded to. Of this inscription I give an exact facsimile, made by help of a squeeze.

That Isaiah is here mentioned is rather unexpected. The place where the prophet was killed, under Manasseh, is shown more to the south, and on the opposite side of the valley. His tomb for a time was shown in the same neighbourhood; but the ancient pilgrims speak in such a manner that it is difficult to comprehend where they mean; so, after all, Isaiah's tomb may be somewhere in the village of Silwân, and perhaps under this his chapel. As will be seen in the drawings, there is a cave under the rocky court containing much earth. I hope that by digging there an entrance to rock-cut tombs may be found.

The proprietor of the place tells me, that the adjoining rooms, on the north and south of these chapels, have each such an apse, and also that the rooms, &c., are hewn in the rock, like those belonging to him. They belong to neighbours who were not at home, so that I could not measure or examine them.

That these rock-cut chambers were once used by Christians as chapels is beyond all question; and as the rooms are double, I think some anchorite lived in the outer ones, the inner ones forming the chapels, and the wall between them, with its three openings, representing the wall in front of the choir or altar of Greek churches.

Dr. Papadopoulos thinks the form of the letters of the inscription supports the suggestion that it belongs to the eighth century. But one may doubt whether Christians under Mohammedan rule were in a condition to cut out such rock chambers, and I should think they were made before the invasion of the Arabs. Probably they were Jewish rock-cut tombs before the Christian era, which afterwards were modified by the Christians, and used again for their purposes. According to Matthew, xxiii, 29, and Luke, i, 47, the Jews made monumental tombs for the Prophets, who were killed by their fathers. So we may suppose that these rooms were made by the Jews in the time of Christ, and that afterwards the Christians made apses in them, converting them into chapels. However, more learned men may judge on this matter; my duty is simply to report on them.

C. Schick.

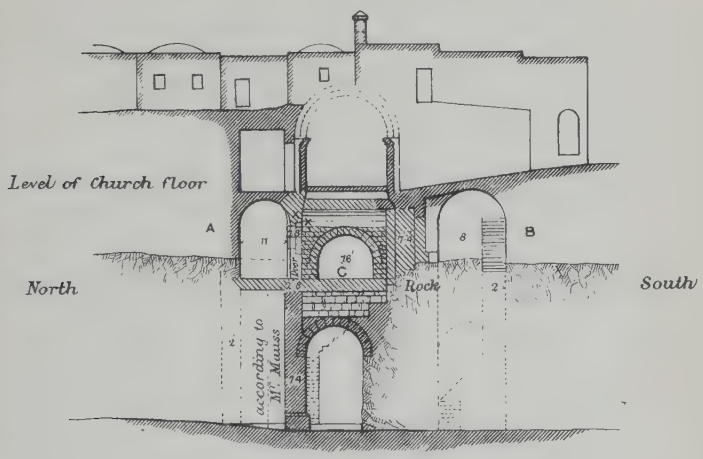
FURTHER REPORT ON THE POOL OF BETHESDA.

The Reis, or Head, of the Algerian Mission Brethren at St. Anne, has returned from his journey, so I called upon him, and was received very kindly. He showed me everything on the establishment, including their collections for a museum. Besides lamps and other pottery they have not much, but a good number of coins, Roman, Greek, Arabic, and Jewish.

With regard to excavations and clearing the place, I found they have removed all the earth down to the top of the pool, by which it was discovered that the five little rooms, or porches, just over the pool were

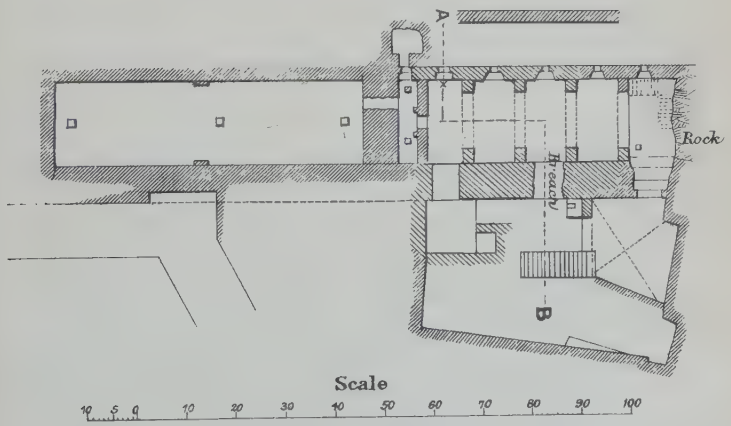
SECTION ON LINE A.B. OF PLAN

Dark Shading represents old discoveries
Light " " new "



PLAN SHOWING
NEW DISCOVERIES AT THE POOL OF BETHESDA

Dark Shading represents old discoveries
Light " " new "
x Place of the fresco
See Quarterly Statement 1888 P. 123.



all connected one with the other by an open arch, as I endeavour to show in the enclosed drawings. It is easy to see that these arches, and the five rooms or porches, did not belong to the original building, but were put in afterwards, and very likely the Reis is quite right in suggesting that as the original five porches were destroyed, the Crusaders, in order again to have some sort of porches, made these five *liwans*, or open rooms, as a special storey over the pool, as the accumulation of *debris* was great, and the surface of the ground already at their time at a much higher level.

It is now quite clear that the old (or original) church stood immediately on the pool, *i.e.*, the top of the latter formed the flooring of the church ; the northern wall of it still stands to a good height, and has four windows (which I mentioned in a former letter, see *Quarterly Statement*, 1888, p. 119). At the north-west corner is a door, and over it the wall is not pierced by a window, but is flat, and on it was painted the now celebrated *fresco*. The picture I found just as it is described by Professor Harris in the " British Weekly," No. 142, p. 192, very indistinct. One can only recognise parts of the wings, the nimbus round the head, which latter has been expressly destroyed. Of a hand I could see nothing, but round about the figure, which is without legs, or at least with none that are visible, the waves of the water, given with a brown colour, and not blue, as one would expect. But as these brown lines are at some distance one from the other, it may be that the finer colour of the water has disappeared, and now only parts of the waves remain, which, as, according to our old writers, the water was reddish, would also have that colour.

According to what can still be seen, the figure was the size of a young man, not a child. In a few other places are also little pieces of fresco visible. So it seems the old church, before these five arches, or " crypts," were built, had everywhere on the walls fresco paintings.

Opposite the fresco of the Angel there is, in the southern wall of the church, a wide opening leading into a chamber, which had formerly towards the east, some more rooms, which are now destroyed. The church wall is very thick, and a hole is broken through it. Outside of it are the remains of a strong square pier, and the Reis expressed the opinion that once a pillar may have stood on it, parts of such a pillar, especially the capital, having been found. South of this pier a flight of steps was found but it is not easy to decide whether they were old or of later, perhaps Mohammedan, work. One would think the latter, but the steps are so much trodden as to prove that they had been for a long time in use. My first idea was that this is the upper branch of the regular stairs leading down to the water, but as northwards of it the rock rises even higher it cannot be, and very likely it is the stair to another similar pool south of the other, which further excavations will prove. In the enclosed section (No. 3) I explain this in dotted lines.

To the large tank or cistern on the west, which I reported on last year (*Quarterly Statement*, p. 123), nothing more has since been done, but the

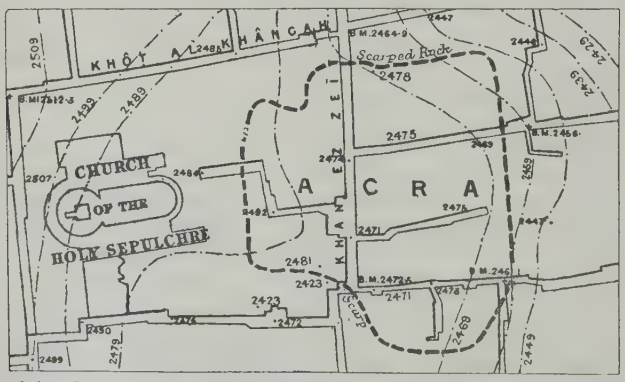
Reis told me that they have now bought all the little houses as far as this tank extends and north of the pool, and will, in course of time, thoroughly examine the locality.

In case there should be found a similar pool to the south, then the rock wall between the two would be thick enough (about 15 feet) to have carried the middle (or fifth) porch, and this would explain how different kinds of water could be in two pools so near together; the one would get water simply from the rain falling on the top and the roofs round about; the other would be fed by conduits bringing rain water from a distance. Such water from outside the town always becomes reddish when it first falls, and afterwards becomes clear.

C. Schick.

ROCK LEVELS IN JERUSALEM.

The better paving of the streets is still going on, although very slowly. It is not in every street that anything of interest is found, but in some this is the case, as I have reported from time to time. To-day I have to say that the so-called "Akkabat al Takiyeh" (going eastward from the Church of the Sepulchre) was recently done. Now, in the Ordnance Survey Plan, scale $\frac{1}{2500}$, stands in about the middle of its length, on the south side, a bench mark, a few feet above the ground, with the height 2,456 feet above the Mediterranean; 45 feet west of this, near the arch going over the street, the scarp of the rock was found, going south and north, facing east, the height or top of the rock there being 2,462 feet above the sea, *i.e.*, 6 feet higher than the bench mark, so that when grading the surface they had to cut the road through the rock.



West of it, about 190 feet distant, the rock crops out from the ground to a height of 2,477 feet.

This new discovery proves that I was right in stating in one of my reports in 1887 that here, east of the Church of the Sepulchre, is a rock terrace, which is surrounded, or nearly surrounded, by scarps to a con-

siderable height. Further north, 68 feet south of the Tarik es Serai, it is known for a long distance. To the south it was found and reported upon last year, on the Russian ground, and now we find it on the east. Opposite the bench mark mentioned, where the letter T stands, the house had tumbled down, and was recently rebuilt, its foundation being laid 20 feet below the surface, and still no rock found, so that the scarp here must have a height of at least 30 feet, and I am convinced it is 40, or even more. The word "ACRA" is on the Ordnance Survey Plan put too far east. The place where C R A stands belonged already to the "Makdesh" (Zephaniah i, 11). All this I have endeavoured to explain by the accompanying plan, in which I show the probable extent and form of the Acra terrace with dotted lines.

C. SCHICK.

REMAINS OF THE OLD CITY WALL.

AT the beginning of this year I reported on remains of an ancient and very strong wall found near the north-western corner of the present city, at the Latin Patriarch's palace, and my report was published, together with the drawings illustrating it, in *Quarterly Statement*, 1889, p. 65, where I (p. 66) promised to report whatever further may be found. I have now to fulfil this promise.

Northwards, as I hinted in my last, nothing has been done since, but southwards it was found that the wall existed only for 8 feet further south, with large stones on both sides and the middle filled up, but that beyond this such stones were only scattered here and there, most of them *in situ*, for a short distance ; those not *in situ* being turned over or broken. The priest who had the direction of the work told me that a few such stones were found when the palace was built a dozen years ago and that it seems the wall had an angle just where in the Ordnance Survey Plan, scale $\frac{1}{2500}$, stands the letter R of the work, "Tarik." But this is merely a suggestion, and not proved, as he said the supposed angle of the wall gave to the latter an easterly direction, which would bring it into connection with the remains found some years ago, and reported in *Quarterly Statement*, 1886, p. 23, and afterwards ; and this seems to me the reason why a corner is suggested, which very likely did not exist. I suppose the wall went straight on, very probably to the tower found when shops were built outside the present wall, in front of the present third tower, north of Jaffa Gate, and that here was thus a kind of corner, not a right angle, but an obtuse one.

At the little chapel north of the barracks in Tarîk Sitti Maryam the work is going on again, but nothing more of interest has been found. They have cleared away all the walls, &c., towards the east, and thrown the site of this chapel and the premises of the Chapel of the Flagellation into one.

C. SCHICK.

A SUPPOSED DRUIDICAL STONE.

There are on the plain, south of Jerusalem, near the village Beit Sŭfâfa on the large map, some points with the name "Es Seba Rujum," and in the "Memoirs," Vol. III, page 157, it is said: "Large stone heaps, apparently formed by clearing the surrounding land of stones for cultivation." This is the first and general impression one gets when seeing them, but looking closer there are several remarkable points, which lead to the supposition that these heaps may have had some other origin. These are, first, their largeness; second, their regular situation; and third, their number seven.

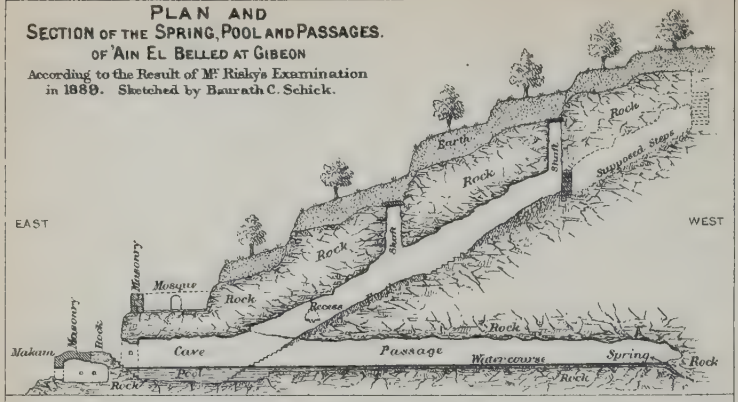
Everywhere in the mountain may be seen heaps of stones, made by clearing the land, but in general they are not so large as these nor similar in form, and may be of any number. On many parts of this plain there are at present not more stones in the field than on that part surrounding these mounds, and there are no other such heaps, only smaller ones of irregular form, spread over the land without any plan—here there is a regular plan on which the heaps are arranged. Excavation might lead to some result, and throw light on their origin. Besides the seven large heaps, there are several others of much smaller size, and irregularly situated. They seem to have once been buildings, now entirely fallen into shapeless ruins, and I should think are of a later period than the large heaps.

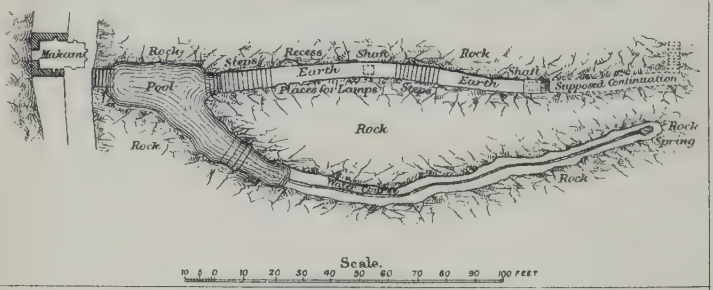
From one or two of these smaller heaps stones were recently taken away for the Bethlehem road or new buildings. One day I heard that a marvellous stone had been found, so I went there, and found a stone still standing exactly upright, so that I judged it may be *in situ*, and by closer examination became convinced it had been once a Druidical stone. I send plan and view of its four sides. It is 2 feet 6 inches wide, and on an average 13 inches thick, and crops out 3 feet from the ground. The top surface slants a little towards the sides, especially towards the west, where there is in the middle a shallow depression. The north and south sides are nearly straight, but not very smooth, and each has a hole going in for 9 and 9½ inches, the outer opening having the figure of a human mouth, 5 to 6 inches wide, and about 1 inch high in the middle, so that one can put his hand a few inches into it. Towards the interior these holes are gradually narrowed to a kind of point. That on the south side is a little higher than the other, and goes a little downwards; the northern one, which is somewhat lower, goes a little upwards. One might think these holes to be natural clefts in the stone, but they are, especially at the lower part, smoothed and polished by frequent handling. On the eastern side there is a round hole at the same height, also going in 9 inches. This eastern side has another peculiarity, viz., at the same level as the holes above-mentioned, a projecting ledge, so cut that one-half of the breadth of the projection is about 5 inches higher than the other half.

The opposite or western side of the stone is still more remarkable.

PLAN AND SECTION OF THE SPRING, POOL AND PASSAGES, OF 'AIN EL BELLED AT GIBEON

According to the Result of Mr Risky's Examination in 1889. Sketched by Baurath C. Schick.





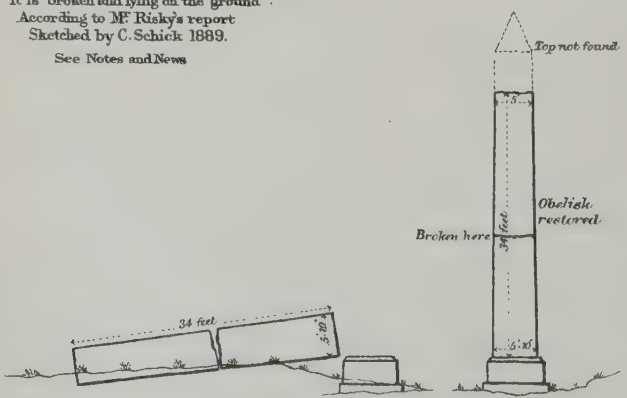
Scale.

10 5 0 10 20 30 40 50 60 70 80 90 100 FEET

OBELISK, FOUND IN THEATRE CÆSAREA

It is broken and lying on the ground.
According to Mr Risky's report
Sketched by C. Schick 1889.

See Notes and News



Scale

10 5 0 10 20 30 40 FEET

F. S. Weller lith

At first sight it appears to be covered with cracks, which on examination are found to be regular grooves, each about $\frac{1}{4}$ to $\frac{1}{2}$-inch deep and about $\frac{1}{4}$-inch wide, made by a tool of that breadth, as its marks can still be recognised. These furrows run obliquely downwards towards the centre of the stone. About half-way down is a natural curved cleft *across;* the others, or at least the greater part, are artificial. On another day I excavated the spot and found that the stone ended about 20 inches below, and that it stands on a layer of roughly-hewn stones, and is not *in situ*. It was used as a door-post to a room which was built here, the threshold of which is still on the ground, and a stone found against it in a slanting situation appears to have been the lintel. The bearings of the stone were north 33° west, the line just going to the Minaret on the Neby Dâûd buildings; but of course as the stone is no more *in situ* the bearings are of no value.

After reading Captain Conder's report on these old stone monuments (*Quarterly Statement*, 1882, p. 69), I became the more convinced that we have here a stone, belonging once to a Canaanitic altar of offerings, which may perhaps have stood in connection with the Seba Rujum, or seven large stone heaps.

C. Schick.

THE WATERS OF GIBEON.

I send drawings, plan, and section of the well or spring at El Jîb, the ancient Gibeon. Respecting this the Memoir to the Survey, vol. iii., p. 94, says:—"There are eight springs, which issue from the sides of the hill, the most important being 'Ain el Belled ("Spring of the Village"). This is on the south-east, at the foot of the steep hill-side, and issues in a rock chamber, about 30 feet long, 7 feet wide, and 7 feet high. The water is clear and abundant in a pool within the cave, said to be 3 or 4 feet deep. On the right, at the back, a passage is said to exist, and on the left steps leading to the surface of the hill above. These cannot now be seen, and the passage is blocked up. . . . The cave is reached by a descent of several steps. . . . There is a recess at the mouth of the cave, as if for a bar, probably showing that the spring was once closed with a door, when it could no doubt be reached from above within the city (as at Jerusalem)." A few months ago a Russian gentleman carefully examined the localtity, and according to the statements and descriptions which he gave me I have made these drawings. He went up the steps and incline until he came to a place where the passage is walled up. He found two shafts, the openings of which are covered with flat stones. He also went to the source of the spring, taking off his garments and walking through the water, and measured the length of the passage. The measurements may be right, but I doubt the correctness of the bearings. These observations are important. The arrangement resembles that of the Siloah spring at Jerusalem.

C. Schick.

NOTES FROM GALILEE.

Shefa 'Amr.—In my report of May, 1889, I gave a sketch of a richly ornamented tomb found south of Shefa 'Amr (see *Quarterly Statement*, 1889, p. 188), and I am now able to send a photograph of the same. I have also made a plan of the interior, which was then filled with rain water. The latter has not yet entirely disappeared, and the bottom is full of mud as well as the interior of the loculi. The tomb does not contain *kokim* as was told me by natives, but three very carefully worked *loculi* with arcosolia, each in one of the three walls of the cave. The entrance facing north, with its rich and curious ornamentation, has been described before. By the low door we go down two steps to the bottom of the cave into a rectangular room measuring 5 feet 3 inches each side by a height of 5 feet 6 inches from the floor to the nicely worked flat ceiling. As before said, the east, south, and west walls contain each a *loculus* 5 feet 7 inches long, 1 foot 10½ inches to 1 foot 8 inches wide, and 1 foot 8 inches deep, covered by an arcosolium without ornamentation. Although the interior is very well preserved and the corners as sharp as if worked recently, there is no sign of any ornamentation visible, contrary to the neighbouring tombs mentioned in the "Memoirs," vol. i, pp. 340, 341, which show a rich ornamentation also along the arcosolia. The rock is a soft white "Maleki" limestone; in a short time both entrance and interior will be filled up again with mud; I already had to clear away a considerable mass to be able to photograph. Shepherds and vineyard-watchers use the tomb as a place of refuge for the night; fires are lighted and the ornamentations blackened and spoiled.

Khŭrbet Hûsheh.—This ruin, mentioned in the "Memoirs," vol. i, p. 311, and by Guérin ("Description de la Palestine," i, pp. 415, 416), to which my attention was directed by the Rev. P. van Kasteren, of the St. Joseph's University of Beyrût, must have been an important place, to judge from the mass of building stones and the fragments of columns lying about. Now that the grass is dried up a regular city wall can be traced. On the main road running from the well towards the ruin some fine capitals are lying about, which have a close resemblance to those which on other sites have been stated to be remains of synagogues. The shafts of columns lying about generally have the basis or capital worked out of the same piece, have a diameter of 18 inches, and are composed of Nâri limestone.

The inhabitants of Shefa 'Amr, with whom I spoke about Khŭrbet Hûsheh, and to whom this ruin belongs, cannot sufficiently praise the excellence of the water of the well or spring, the Bîr Hûsheh, at the western foot of the ruin; some of the old folks assured me that Djezzâr Pasha and 'Abdallah Pasha, the famous Governors of 'Acca, always had their drinking water supply from this well, and on their excursions into the interior generally camped here on account of the water.

Through the kindness of Pater van Kasteren, who showed me the

place, I am able to send a copy and photograph of a very curious inscription in Greek characters, engraved on a flat rock very near Khŭrbet

Inscription near Khŭrbet Hûsheh,

Hûsheh. This spot is, according to our exact measurements, 508 metres to the east of the Khŭrbet counted from the eastern city wall, situate in a rocky region a little south of the road leading from the Khŭrbet to Shefa 'Amr, 100 metres to the west of a small olive grove. The inscription is read facing the Khŭrbet. Each character of the first (upper) line has a height of $6\frac{1}{4}$ inches ; they are very much defaced. The characters of the lower (second) line are $8\frac{1}{2}$ to 9 inches high and better preserved. Between the lines there is a space of 1 foot 4 inches. A sort of frame line seems to have bordered the inscription.

So far as I am aware we owe the original discovery of this inscription to Père Julien, of Beyrût, to whom it was first shown by natives of Shefa 'Amr.

G. Schumacher.

METEOROLOGICAL OBSERVATIONS.

Sarona, 1886.

The numbers in column 1 of this table show the highest reading of the barometer in each month ; the maximum for the year was 30·164 ins., in December. In the years 1880, 1881, and 1884 the maximum was in January, in 1882 in February, and in 1883 and 1885 in December, as in

this year; the mean of the preceding six years highest pressures was 30·214 ins. The highest reading in the seven years was 30·269 ins., in the year 1880.

In column 2, the lowest reading in each month is shown; the minimum for the year was 29·543 ins., in April. In the year 1883 the minimum was in January, in 1881 in February, in 1880, 1884, and 1885 in April, as in this year, and in 1882 in July; the mean of the six preceding lowest pressures was 29·512 ins. The lowest reading in the seven years was 29·482 ins., in the year 1885.

The range of barometric readings in the year was 0·627 inch; in 1880 the range of readings was 0·780 inch; in 1881, 0·711 inch; in 1882, 0·704 inch; in 1883, 0·579 inch; in 1884, 0·757 inch; and in 1885, 0·680 inch. The mean for the six preceding years was 0·702 inch.

The numbers in the 3rd column show the range of readings in each month; the smallest was 0·132 inch in August, this being the smallest range in any month in the seven years; in the year 1883 the smallest was in June; in 1882 in August as in this year, and in 1880, 1881, 1884, and 1885 in October. The largest monthly range was 0·531 inch in March; in the years 1883 and 1884 the largest was in January, in 1882 in February, in 1881 in March as in this year, in 1880 in April, and in 1885 in September. The largest range in any month in the seven years was 0·710 inch in the year 1885.

The numbers in the 4th column show the mean monthly pressure of the atmosphere; the greatest, 29·979 ins., was in December. In the years 1880, 1881, 1882, and 1884 the greatest was in January, in 1883 in February, and in 1885 in December, as in this year. The highest mean monthly reading in the seven years was 30·060 ins., in the year 1882. The smallest mean monthly reading was 29·677 ins., in July. In the years 1880, 1882, and 1883, the smallest was in July, as in this year, and in 1881, 1884, and 1885, in August. The lowest mean monthly reading in the seven years was 29·657 ins., in the year 1885.

The highest temperature of the air in each month is shown in column 5; the highest in the year was 112°, in June; the next in order was 96° in October, and 94° in September. The first day in the year the temperature reached 90° was on April 30th. In June there were six days when the temperature reached or exceeded 90°; the highest, 112°, took place on the 15th of June, in August on two days, in September on four days, and in October on three days; therefore the temperature reached or exceeded 90° on 16 days. In the preceding six years, viz., 1880, 1881, 1882, 1883, 1884, and 1885, the temperature reached or exceeded 90° on 36, 27, 8, 16, 14, and 24 days respectively. In the six preceding years, viz., 1880, 1881, 1882, 1883, 1884 and 1885, the highest temperatures were 103°, 106°, 93°, 106°, 100°, and 103° respectively.

The numbers in column 6 show the lowest temperature of the air in each month. The lowest in the year was 37° on both the 22nd and 23rd of December; the next in order was 39° on the 15th of March, and in no other month throughout the year was the temperature below 40°;

therefore the temperature was below 40° on three nights in the year. In the preceding six years, viz., 1880, 1881, 1882, 1883, 1884 and 1885, the temperature was below 40° on 13, 2, 13, 2, 9, and 3 nights respectively. In the six preceding years, viz., 1880, 1881, 1882, 1883, 1884, and 1885, the lowest temperatures were 32°, 39°, 34°, 35°, 32°, and 38° respectively.

The yearly range of temperature was 75°, being larger than any in the six preceding years, viz., 1880, 1881, 1882, 1883, 1884, and 1885, in which the yearly ranges were 71°, 67°, 59°, 71°, 68°, and 65° respectively.

The range of temperature in each month is shown in column 7, and these numbers vary from 26° in August to 55° in June.

The mean of all the highest by day, of the lowest by night, and of the average daily ranges of temperature are shown in columns, 8, 9, and 10 respectively. Of the high day temperature, the lowest, 64°·7, is in January. In the years 1884 and 1885 the lowest in each year was in January, as in this year; in 1881, 1882, and 1883, in February; and in 1880 in December. The highest, 87°·9, is in August; in 1880 the highest was in May; in 1881, 1883, 1884, and 1885, in August, as in this year; and in 1882 in September.

Of the low night temperature, the coldest, 48°·1, is in December; in the years 1880, 1882, and 1884, the coldest in each year was in January; in 1883 and 1885 in February; and 1881 in December, as in this year. The warmest, 69°·2, is in August; in the year 1885 the warmest was in July; in the years 1880, 1881, 1882, 1883, and 1884, in August, as in this year. The average daily range of temperature is shown in column 10; the smallest, 15°·4, is in January; in 1880, 1883, and 1885, the smallest was in January, as in this year; and in 1881, 1882, and 1884, in February; and the greatest, 23°·5, in October.

In column 11, the mean temperature of each month is shown as found from observations of the maximum and minimum thermometers only. The month of the lowest temperature was January, 57°·0. In the years 1880, 1884, and 1885, the lowest was in January, as in this year, in 1881 and 1882 in February, and in 1883 in December. That of the highest was August, 78°·6, and in the six preceding years the highest was in August as in this year. The mean temperature for the year was 66°·8, and of the six preceding years, viz., 1880, 1881, 1882, 1883, 1884, and 1885 were 66°·4, 66°·7, 65°·5, 65°·7, 65°·7, and 65°·9 respectively.

The numbers in columns 12 and 13 are the monthly means of a dry and wet-bulb thermometer taken daily at 9 a.m. In column 14 the monthly temperature of the dew point, or that temperature at which dew would have been deposited is shown; the elastic force of vapour is shown in column 15. In column 16 the water present in a cubic foot of air is shown; in December it was as small as $2\frac{1}{4}$ grains, and in August as large as $7\frac{7}{8}$ grains. In column 17 the additional weight required for saturation is shown. The numbers in column 18 show the degree of humidity, saturation being considered 100; the smallest number indicating the driest month, is 53 in December, and the largest, 77, was in January;

the weight of a cubic foot of air under its pressure, temperature, and humidity at 9 a.m. is shown in column 19.

The most prevalent wind in January was S., and the least prevalent were W. and S.W. ; in February the most prevalent was S., and the least was N.W. ; in March the most prevalent was S., and the least was N. ; in April the most prevalent was N.W., and the least were E., N.E. and S.E. ; in May the most prevalent were W. and S.W., and the least were E. and S.E. ; in June the most prevalent was W., and the least were E. and S.E. ; in July and August the most prevalent were W. and S.W., and the least prevalent were N., E., and compounds of E. ; in September the most prevalent was S.W., and the least were E. and S.E. ; in October the most prevalent were S. and S.W., and the least were E. and compounds of E ; and in November and December the most prevalent was S., and the least prevalent winds were N.E. and compounds of E. The most prevalent wind for the year was S.W., which occurred on 69 times during the year, of which 13 were in August, and 12 in both July and September, and the least prevalent wind was E., which occurred on only 5 times during the year, of which 2 were in both January and February, and 1 in March.

The numbers in column 29 show the mean amount of cloud at 9 a.m. ; the month with the smallest is June, and the largest January. Of the cumulus, or fine weather cloud, there were 71 instances in the year, of these 14 were in October, 10 in September, and 9 in January, and only 2 in February. Of the nimbus, or rain cloud, there were 48 instances, of these 10 were in February, 8 in December, and 7 in January, and only 2 from June to October. Of the cirrus, there were 56 instances. Of the cirro-cumulus, 50 instances. Of the stratus, 12 instances, and of the cirro-stratus, 9 instances ; and 119 instances of cloudless skies, of which 20 were in June, 14 in December, and 12 in both July and October.

The largest fall of rain for the month in the year was 5·00 ins. in December, of which 1·65 inch fell on the 11th, 1·14 inch on the 15th, and 0·85 inch on the 14th. The next largest fall for the month was in January, 4·47 ins., of which 1·28 inch fell on the 26th, 0·79 inch on the 16th, and 0·75 inch on the 14th. No rain fell from May 11th till the 30th of October, making a period of 171 consecutive days without rain. In 1880 there were 168 consecutive days without rain ; in 1881, 189 consecutive days ; in 1882 there were two periods of 76 and 70 consecutive days without rain ; in 1883, 167 consecutive days ; in 1884, 118 consecutive days ; and in 1885, 115 consecutive days without rain. The fall of rain for the year was 20·09 ins., being 8·59 ins., 2·00 ins., and 9·97 ins. less than in 1880, 1882, and 1883 respectively, and 2·60 ins., 1·36 inch, and 0·03 inch more than in 1881, 1884, and 1885 respectively. The number of days on which rain fell was 66. In the six preceding years, viz., 1880, 1881, 1882, 1883, 1884, and 1885, rain fell on 66, 48, 62, 71, 65 and 63 days respectively.

JAMES GLAISHER.

NORMAN PALESTINE.

SINCE my paper in the last *Quarterly Statement* was printed, Sir C. W. Wilson has kindly called my attention to two papers on the subject which had escaped my attention.

The first of them is by M. Clermont-Ganneau ("Recueil D'Archéologie Orientale," No. 5, 1888). In this he has worked out fully the identification of Mont Gisart with *Tell Jezar* (pp. 350–391), giving the episode from William of Tyre to which I referred. I believe no other writer has suggested this identity; and M. Ganneau's paper was published a year before my note. I think, however, the suggestion that Galatia was the present *Keratiyeh* is hardly as satisfactory as its identification with *Jelediyah*, which I proposed in the *Quarterly Statement*, and published in the "Memoirs" (vol. iii). M. Clermont-Ganneau identifies the *Cannetum Sturnellorum* (Itin. Ric. v, chs. xli and xlv) with *Wady Kassâbah* near Tell el Hesy, on account of the names, and this appears to me to fit well with the other places mentioned, and with the distances which he has worked out.

The other paper is a careful and exhaustive one by Herr R. Röhricht: "Studien zur mittelalterlichen Geographie und Topographie Syriens," in the "Zeitschrift des Deutschen Palestina Vereins" (x, 4), 1887. In this I find that half of the identifications which I proposed (*Quarterly Statement*, October, 1889, pp. 197-200) have already been proposed two years earlier by this scholar. Their reliability is much increased by this independent opinion, and the following sites are those to which I refer:—

Amouhde	=	*'Amûdeh.*	Aschar	=	*'Askar.*
Benehabeth	=	*Beni Hârith.*	Bet Digge	=	*Beit Dukku.*
Bether	=	*Bittîr.*	Bethsurie	=	*Beit Surîk.*
Chole	=	*Kuleh.*	Casracos	=	*Kefr Kus.*
Courcoza	=	*Kurza.*	Dere	=	*ed Deir.*
Feitata	=	*Fattâtah.*	Galilee	=	*Jelîl.*
Geschale	=	*Kashkalîyeh.*	Gez	=	*Jett.*
Heulem	=	*'Aulam.*	Heedix	=	*Hadîtheh.*
Hubim	=	*Hubîn.*	Kefreachab	=	*Kefr 'Akâb.*
Lahemedie	=	*El Hammadîyeh.*	Lecara	=	*Kara.*
Larmedie	=	*Er Rumeidîyeh.*	Migedell	=	*Mejdel.*
Meimes	=	*Mâmâs.*	Quefrenebit	=	*Kefr Nebîd.*
Saka	=	*S'as'a.*	Terfalsa	=	*Teir-filsieh.*
Turbasaim	=	*Turmus Aya.*	Der Sabeb	=	*Deir esh Shabîb.*

In four cases, also, I think that Herr Röhricht has given a better explanation than that which I have offered in the paper in question.

(1) Ferachiem—Pisan casale—should be near Tyre. *El Ferakîyeh* (Sheet I) very possibly preserves the name, though only applying to a hill.

(2) Jerraz. A casale of St. Mary of Jehosaphat, may be *Jerâsh* (S.W. of Jerusalem) (Sheet XVII).
(3) Saarethe. A casale of the Hospitallers, may be the ruin *Sh'areta* (Sheet XX).
(4) Subahiet. A casale of the Holy Sepulchre Church, may be the ruin *Subhah*, south of Jerusalem (Sheet XVII).

Herr Röhricht's paper is a careful and valuable discussion of the subject, and fairly exhaustive. He has used the P. E. F. Map and Memoirs (which were unknown to M. Rey), and has treated of 600 out of the 700 places of which the names are mentioned in documents of the Crusading period. He goes over the same lists previously studied by Prutz, Rey, and other scholars, and accepts their results in 240 cases, to which I may add 12 in which his identifications are the same given in the P. E. F. Memoirs, which (as far as I know) were not fixed before 1882–3. In about 85 cases (including those above noted) his identification appears to be a new one and satisfactory. In a very few instances he has been misled, by want of acquaintance with the ground, into suggestions which are not tenable; and in some cases I think the suggestions of his predecessors are better than those which he advocates. I propose to add about 40 more sites to those mentioned in my former paper, and this leaves only 200 places, for most of which different suggestions have been made, but which, on account of corrupt copying of the MSS., and from the meagre indications of position, remain doubtful. It will thus be seen that Herr Röhricht's paper is a substantial contribution to the subject.

The following are the cases where his new proposals seem to me to be evidently correct: —

Casales of the Holy Sepulchre Church.

1. Salome, near Bîreh, *Salamîyeh* (Sheet XVII).
2. Beitumen, *Beitunia*, better than *B. Anân* (Sheet XVII).

Casales of St. Mary of Jehosaphat.

3. Bethsan, *Beit Shenna* (Sheet XVII).
4. Dargeboam, *Deir el Okbân* (Sheet XIV).

Casales of Abbey of St. Sion.

5. Dersoeth (not the one in Galilee), *Deir es Sûdân* (Sheet XIV).
6. Messaria, near Tyre, *Mezr'ah* (Sheet II).

Casales of the Church of Bethlehem.

7. Phaghor, *Kh Faghûr* (Sheet XVII).

Casales of the Abbey of Tabor.

8.	Senbra	*Sinn en Nâbra* (Sheet VI).
9.	Cafartamara	*Tumrah* (Sheet V or Sheet IX).
10.	Casta	*Kastah* (Sheet VI).
11.	Noriz	*Nûris* (Sheet IX)
12.	Capharkeme	*Kefr Kama* (Sheet VI).

Casales of the Knights Hospitallers.

13.	Coquebel	*Kaukabah* (Sheet XX).
14.	Camsa	*Kemâs* (Sheet XX).
15.	Beze	*Bezzeh* (Sheet XVI).
16.	Deir Nacbar	*Deir Nakhkhâs* (Sheet XX).
17.	Terra Malvarum?	*Khobbeizeh* (Sheet VIII).
18.	Artais	*Irtah* (Sheet XI).
19.	Damor	*ed Damûn* (Sheet V) from position.
20.	Cafriasim	*Kefr Yasîf* (Sheet III).
21.	Cafresur	*Kefr Sib* (Sheet XI) from position.
22.	Socque	*Shuweikeh* (Sheet XI).
23.	Turrearme	*Tul Keram* (Sheet XI) from position.
24.	Theris	*Tîreh* (Sheet IX).
25.	Losserim	*Sîrîn* (Sheet IX).
26.	Torciaffe	*Teir Harfa* (Sheet III).
27.	Theyre	*Tîreh* (Sheet IV).
28.	Teira	*Tîreh* (Sheet XI).
29.	Bethiben	*Beit Iba* (Sheet XI).

Casales of the Teutonic Knights.

30.	Der Henne	*Deir Hanna* (Sheet IV).
31.	Seebeique	*Shubeikeh* (Sheet III).
32.	Jashon	*Jathûn* (Sheet III).
33.	Danehyle	*Fasl Dâniâl* (Sheet IV).
34.	Clil	*Iklîl* (Sheet III).
35.	Delaha	*Delâta* (Sheet IV).
36.	Quabrique	*Abrikha* (Sheet II).

Casales of the Pisans.

37.	Elfarachie	*Ferakîyeh* (Sheet I).
38.	Talobie	*Tarâbieh* (Sheet I).
39.	Aithiti	*'Aitît* (Sheet II).
40.	Ainebedelle	*'Ain Abu Abdallah* (Sheet I).
41.	Dordegaye	*Deir Dughiya* (Sheet II).
42.	Darzibine	*Teir Zinbeh* (Sheet II).

Casales of the Venetians.

43. Homeire	*Humeireh* (Sheet II).
44. Lahaya	*Tell el Haiyeh* (Sheet II).
45. Szorcoorum	*Shaghûri* (Sheet II).
46. Lahemedie	*el Hammâdîyeh* (Sheet I).
47. Lanahemine	*el Hanîyeh* (Sheet I).
48. Tyrdube	*Teir Dubbeh* (Sheet I).
49. Brochey	*Berâkhei* (Sheet II).
50. Lagariddie	*Jârâdîyeh* (Sheet I).

It will be seen from this list that Herr Röhricht, by aid of the P. E. F. Map, has added materially to M. Rey's results, especially in elucidating the possessions of the Hospital of St. John in the plains and of the Italian Republics, in the vicinity of Tyre, and in Upper Galilee.

The remarks which follow may be of use to those who are interested in the subject of Crusading Palestine ; and though venturing sometimes to disagree with those who have specially studied the question, I wish to be understood fully to appreciate the careful work of M. Rey and of Herr Röhricht.

Casales of the Holy Sepulchre.

(From the H.S. Cartulary.)

There were 70 villages given by the kings and barons at various times to this church in the 12th century. They lay mainly between Jerusalem and Nâblus and in the hills north of the latter town. The majority are well known places, as noted in the "Memoirs."

The following may require a few words of notice.

1. *Betheflori* is, I think, probably *Beit Furîk* (Sheet XII), it lay in the Nablus territory, not *Beit Fâr* (Röhricht).

2. *Derœrip* may be *Deir Sherâf* (Sheet X), as Herr Röhricht proposes, but I think, perhaps, *Deir Tureif* (Sheet XIV) agrees better for position.

3. *Castrum Feniculi* is *Funeitir* according to Röhricht (Sheet VIII). If the word means "fennel" I think it may be sought near Haifa, in the *Wâdy esh Shomarîyeh* ("Valley of Fennel") on the north slope of Carmel (Sheet V).

4. *Bubil* or *Bubin* may be *'Abwein*, as suggested by Röhricht (Sheet XIV), but the initial letter is the gutteral.

5. *Subahiet*, other possible sites are *Soba* (Sheet XVII), and *'Ain Subieh* (Sheet XVII).

6. *Urniet* or *Uniet* might be *el Beituni* (Sheet XVII), it is a very doubtful site.

7. *Zenu* and *Zenum*, the proposed site at *Zanû'a*, is not impossible, but is rather far from the other places.

8. *Helmule.* I think *Almit* preferable to *Malhah* or *el 'Ammûr* proposed by Röhricht (all on Sheet XVII).

9. *Beitelamus*, Herr Röhricht follows Rey, but the site is doubtful geographically. *'Ain Beit Tulma* is worth consideration (Sheet XVII).

10. *Barineta* or *Barineta* cannot well be *Bîr el Mutih.* I think rather that the ruin *Meita* near Bireh (Sheet XVII) or *Bornât*, a ruin on Sheet XIV, is to be understood.

11. *Benehatie.* Röhricht proposes *Beni Hasan*, a district name. I would suggest *Kefr 'Atîya* or *Kefr Hatta* (Sheets XV and XIV).

12. *Ragabam* is, I think, clearly *Rûjîb* (Sheet XIV), and *Roma, el 'Ormeh* (Sheet XIV).

13. *Sapharoria* seems to me best placed at *Kefr Urieh* (Sheet XVII). In Fellah dialect *Chefr* or *Shefr* = *Kefr.*

14. *Gith* is somewhat doubtful, but I think *Jett* (Sheet XI) is better than *Beit Jîz.*

15. *Thora* may be *Tîreh*, near Bethhoron (Sheet XIV).

16. *Deirfres*, perhaps *Abu Fureij* (Sheet XVII).

17. *La Palmeree* (*cf.* Cartulary, Nos. 127, 128, 144) was near Haifa, mentioned with *civitatis veteris* ("*Haifa el 'Atîkah*"). Probably the palm grove near Haifa, on the banks of the Kishon, is intended. There are very few palm groves in Palestine, and it must always have been a marked feature of the place.

18. *La Forest* appears to me to be the Forest of Assur (Itin. Ric. iv, ch. xvi), the existing oak wood near *Umm Sûr* (Sheet X) not *Sindiâneh*, "the oak" (Röhricht).

19. *Buffles* or *Casale Bubalorum*, I see no special reason for connecting with *Umm el Jemâl.* The site which I recently proposed at *Bablûn* (Sheet VIII) is quite possible topographically.

Casales of St. Mary of Jehosaphat.

(Bull of Alexander IV, 30th January, 1255.)

This church which held the supposed tomb of the Virgin, possessed 48 villages in different parts of Palestine, many being well-known places. The following are worth notice :—

20. *Serra*, probably *Surra* (Sheet XI) or *Kh. Sarra* (Sheet XV).

21. *Beith Bezim* I believe to be *Beit Bezzin* (Sheet XI).

22. *Casrielme* seems to have been near Tiberias, and if so, can hardly be *'Alma* as proposed by Röhricht. It seems to be the Arabic قصر الماء (*Kasr el Ma-*) or "Water tower" probably on the shores of the lake.

23. *Lichorat* may have been near Tyre, I am disposed to think at *El Kureih* (Sheet I).

Casales of the Abbey of St. Sion.

(Bull of Alexander III, 1179.)

This church, the present Nebi Dâûd at Jerusalem, held in western Palestine, 28 villages including several well-known places.

24. *Faro fronte* might be for Fara Fonte "the spring of Fara." In this case it would be the *'Ain Fârâh* with ruins near Michmash (Sheet XVII).

25. *Gul* seems more probably to be *Kuleh* (Sheet XIV) than *Juleijil*.

26. *Gerable* may be *Jurbeh* as proposed by Röhricht, or perhaps *Jerâbeh* (Sheet XVII), near Yalo.

27. *Caforana* seems to me to be one of the two sites (Sheets XIII, XIV) called *Kefr 'Ana* rather than *Kefrein*.

Casales of the Church of Bethlehem.

(Bull of Gregory IX, 1227 A.D. Clement IV, 1266 A.D.)

The church of the Nativity owned 40 villages, which are difficult to identify, as the transcription of the native names seems to be very incorrect.

28. *St. George* was apparently *el Khudr*, near Bethlehem, as suggested by Röhricht. The same place is mentioned by John Poloner in 1422 ("Memoirs" iii, p. 26).

29. *Quercus.* I think the Quercus Abraham, or Abraham's oak, near Hebron, may be intended.

30. *Archas* seems to me to be the Arecha of Marino Sanuto, 1322, A.D., which, as his map shows, was the Bible Archi (Josh. xvi, 2), now *'Ain 'Arûk* ("Memoirs" iii, p. 7).

31. *Bethamar.* There seems no reason to doubt Rey's identification with *Beit Ummâr*, a site of known antiquity. *Beit T'âmir* proposed by Röhricht is named from the T'âmirah tribe, and is probably a modern title.

32. *Cadicherius,* whatever this means it seems doubtful if *Bîr Kadismu* can have any connection. The latter is only a roadside well near Mar Elias, where tradition says the Magi saw the star.

Casales of the Abbey of Tabor.

(Bull of Paschal II, 29th July, 1103 A.D.)

This was one of the first abbeys to be endowed. It owned 34 villages in Lower Galilee, especially round Mount Tabor, as well as 22 beyond Jordan, or in the Jordan Valley.

33. *Desurchain*, an unknown place. Herr Röhricht suggests *Dâr Sursuk*, but he will see from the "Memoirs" (i, p. 145) that this name applies to a modern house. It is named after the Beyrout banker Sursuk, and has no connection with any ancient site.

Casales of the Knights Hospitallers.

(Paoli, 1781).

The possessions of this great order were obtained by purchase from the Barons. They were widely spread, but, especially in the 13th century, they owned the best lands in the maritime plains and western foot hills. Altogether we have the names of 182 of their villages in Western Palestine.

34. *Betharas* seems to me clearly to be *Beit er Rush* (Sheet XX), Herr Röhricht says (p. 239) "Bet dārās, written on the English map Bet Durdis." The English map is correct. Beit Derâs is a well known place (Sheet XVI), but the ruin near Gaza is called Beit Durdis, not only on the P. E. F. Map, but on the older map of Robinson.

35. *El Roheib* is perhaps *er Ruheibeh* south of Beersheba.

36. *Tamarin*, a hill, is perhaps the village of *Tumrah* (Sheet XIX).

37. *Moitana* or *Montana*, I have proposed to find at *el Muteiyen* (Sheet XIV).

38. *Loie.* I do not understand why this should be placed as far north as 'Ajja. It seems to have been near to Sileh, and Rey connects it with *Neby Lauîn* (Sheet XI).

39. *Cafarsalem* is more probably *Selmeh* (Sheet XIII), than *Kefr Sa.*

40. *Caphet* seems unlikely to be *Sefarîn* as proposed by Röhricht, *Keffa* (Sheet XI) seems preferable.

41. *Muresco*, "the Marsh" near Cæsarea, is probably to be sought on the Crocodile River.

42. *Chola* (*Kuleh*) was near Mirabel, which points to the site for that castle proposed in the "Memoirs."

43. *Tour Rouge*, near Caco, there seems no reason to doubt, was *Burj el Atôt*, as proposed by Rey ("Memoirs" ii, p. 178).

44. *Daidonis*, at *Tell ed Dôdehân* (Sheet VIII), as proposed by Rey, seems probable.

45. *Saphet* in the Acre region may be *Shefeiya* (Sheet III).

46. *Casale dou Carebliers.* If Herr Röhricht is right in connecting this with a hill called *el Kharrûbah* by Boha ed Din, 16 kilometres from Acre, and 12 from Haifa, yet it is not necessary to suppose that it is "not on the English map." The distances would roughly agree with *el Khureibeh* on Mount Carmel.

47. *Jheure* may be the *Jherio* of Rey, and seems probably to be *J'aarah* (Sheet VIII).

48–9. *Romette* and *Rome* seem hardly to be the same place, both being

in the same list. Rey proposes *Rummâneh* (Sheet VI) for the first. The other is well known as Roma (*Rûmeh*) not far off.

50. *Lacomedie.* It is not satisfactory to seek for such a name at a Muslem chapel (Sheikh Kaddûm) as proposed by Röhricht. The place was situated between the lake of Tiberias and La Petite Palmerée and had rights of fishing in the lake and mills fed by a stream. This seems clearly to point to *Khurbet el Kaneitrîyeh* north of Tiberias. The little Palmerée was no doubt near the shore where there are a few palms still. The mills were near the lake, no doubt at the *'Ain Fulîyeh* (*cf.* "Memoirs" i, p. 374). Sir C. W. Wilson remarked "two of the sources are surrounded by walls as at the Tabghah spring apparently to feed a mill" (*cf.* "Recov. Jer.," p. 359).

51. *Assera.* Perhaps the best site for this is not 'Asîreh, which is too far south, but *Sireh* near Nein (Sheet IX). The place *Sh'arah*, south of Safed, proposed by Röhricht, is too far north.

52. *Cafran* was near the last, probably *Kefrah* (Sheet IX). Kefr 'Anân is too far away to be probable.

Casales of the Teutonic Order.

(13th century, Prutz 1877.)

Many of these places occur in the preceding lists, as owned in the 12th century, before the loss of Jerusalem. The sites lie in Upper Galilee, and near the sea coast between Acre and Tyre, and 98 names in all are given by Prutz, in his work on the Order, 1877. Many are easily recognised, but a few may be suggested as below :—

53. *Aguille* or *Laguille* appears to be *El 'Ajlîyât* (Sheet III) rather than *Jûlis* (Rey versus Röhricht).

54. *Mezerah.* Herr Röhricht proposes *El Mish'a*, near Haifa (Sheet V. j, i). This word means "the drinking place," and applies to a small spring in a ravine. It is not the name of any village or ruin, and is in the wrong region. There seems no real objection to identifying the site in question with *Mezrah* (Sheet III).

55. *Miscalim*, in Upper Galilee. Röhricht suggests *Maskane*, south-west of Hattin (Sheet VI). The position would, however, point to *Muslakhit* (o. n.). Such inversions are not unknown in the Fellah nomenclature.

56. *La Tyre* appears to me to be *Y'ater* (Sheet IV).

57. *La Quiebre.* No reason is given by Röhricht for discarding *el Kâbry* (Sheet III).

58. *Lanoye*, as mentioned in "Syrian Stone Lore," 1887, seems to me to be *El Yanûh* (Sheet III).

59. *Gabatye* seems to be a distinct place from El Gabeie (*el Ghabsîyeh*, Sheet III). If so, the best site is probably *el Ghabbâti* (Sheet IV).

60. *Cassie* seems more probably *El Kâsy* (Rey), which is on Sheet IV, than *el Kuziziyeh* (Röhricht).

61. *Galafice* is, I think, *Ikhneifis* (Sheet V), not the neighbouring *Khalladîyeh* (Röhricht).

Casales of the Venetians near Tyre.

(Prutz, 1876).

The Venetians claimed a third part of many of the Crown land villages in the neighbourhood of Tyre. The total of names is about 80 in all, including a few Royal Casales mentioned as near those which the Republic claimed in return for services rendered with their fleet. Most of these places are easily fixed at the numerous villages of the Tyre region, but a few are doubtful.

62. *Femom* is, perhaps, the same as Fennes of the Teutonic order, now *Fânis* (Rey. *Cf.* Sheet IV).

63. *Szorcoorum.* An alternative site might perhaps be found in *Abu Sirkîn* (Sheet II).

64. *Maraque.* There seems no objection to Rey's identification with *M'arakah* (Sheet III). Herr Röhricht thinks it the same as Melequie (Malkîyeh, Sheet I). Possibly the Pisan casale Orachie and the Genoese Loaracha, may be the same place. Their names suggest العراق (El 'Arâk "the cavern" or "cliff"), but M'arakah, though not the same word (معركة) would sound much the same to the Franks.

65. *La Cassomie.* Rey's suggestion *El Kasimîyeh* (Sheet I) seems more probable than Röhricht's *Khamsîyeh.*

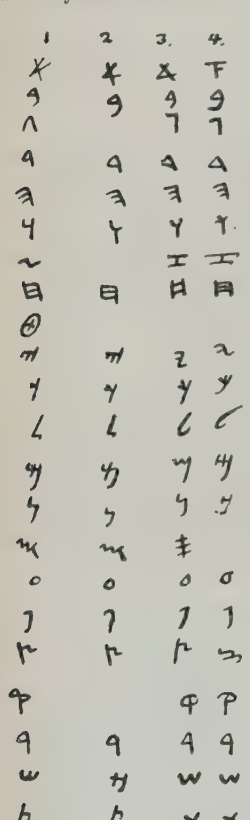
66. *Chateau Arnaud* is placed by Röhricht at Latrun (Toron). I venture to think the view taken by Rey, and yet earlier by De Saulcy, and advocated in the "Memoirs" (iii, p. 15) is the true one, and that the remains of the Crusading fortress, Kal'at et Tantûrah at the village of Burj, represents this castle.

Many of the 700 places belonging to this topography are ancient Bible sites, and we thus find that in 1200 A.D. the nomenclature was unchanged from the days when the Book of Joshua was written, and has remained unchanged to our own times.

C. R. Conder.

THE DATE OF ESHMUNAZAR'S COFFIN.

In "Syrian Stone Lore" I remarked incidentally (p. 146) that we have no inscribed monument in Syria between 530 and 330 B.C. The remark was criticised because it was supposed that I had forgotten Eshmunazar's coffin at Sidon. My intention, however, was (following the opinion of M. Clermont-Ganneau, which he told me in Palestine in 1882 at latest) to refer this important monument to a time as late as or later than Alexander the Great.



The date usually given (*see* Dr. Taylor's "History of the Alphabet") is "the latter part of the 5th or beginning of the 4th century B.C." (vol. i, p. 224). The monumental character was compared with texts from Cyprus of the 4th century B.C., and with the texts of Umm el 'Awamîd 132 B.C. (Corpus Sem. Inscript. I, 1, p. 32), but the main reason for supposing an early date was the hypothesis that Eshmunazar was an independent native ruler.

Another valuable text has since been found at M'asûb, north of Acre, and published by M. Clermont-Ganneau in his "Recueil," No. 2, 1886. This text bears the date of the 53rd year of the people of Tyre and 26th year of Ptolemy Euergetes, son of Ptolemy and Arsinoe. The date agrees with that the Umm el Awamîd text, which is the 143r year of the people of Tyre.

The attached plate shows, No. 1, Eshmunazar's alphabet, No. 2 that of the M'asûb text, and, by way of contrast, No. 3 that of the Moabite stone, and No. 4 that of the Siloam text. It will be clear that no philological objection exists to placing the Eshmunazar text as late as the time of the Ptolemies.

The expression אדנמלכם, or "King of kings," which Eshmunazar gives to the over-lord who bestowed on him the lands of Dor, Joppa, and Sharon, has been thought to refer to one of the kings of Persia; but in the new M'asûb text the same term is applied to Ptolemy, and M. Ganneau has compared it to the κυριος Βασιλειῶν applied to the very same Ptolemy on the Rosetta stone. Eshmunazar was not an independent ruler at all, but apparently a tributary of the Egyptian monarch.

The question is one of considerable interest in connection with the monumental history of Palestine, and an instance of the uncertainty which must exist in judging the dates of inscriptions merely from the forms of the letters or from arguments as to supposed history. We have indeed much yet to learn concerning the history of the alphabet, and the new inscription of Panammu, now in Berlin, and said to be as old as the Moabite Stone, must, therefore, be awaited with much interest, as casting a light on the earlier times in which alphabetic texts are so few. It may, also, perhaps, serve to further the comparison of the Phœnician alphabet with the Cypriote syllabary, to which I called attention a year ago (*Quarterly Statement*, January, 1889, p. 17).

C. R. C.

THE OLD WALL OUTSIDE JERUSALEM.

Traces of the wall mentioned in the October number of the *Quarterly Statement* were clearly visible when I was in Palestine. I always understood that this was regarded as the Crusading Wall. It appears to be connected with the towers outside the Damascus Gate, investigated by Sir C. Warren, and the use of a sort of concrete in parts of the foundations, visible above ground, seems to show that the work may be Mediæval.

The exact line of the Crusading Wall towards the north-west seems to me rather doubtful, the question being whether the Kalât J'alûd stood on the line of wall or not. It may of course have stood as a sort of "keep" inside the wall.

C. R. C.

THE TSINNOR.

It may be useful to refer to what Gesenius says of this word—

צִנּוֹר m. "a cataract" (so-called from its rushing noise), Psalm xlii, 7, "a watercourse," 2 Samuel v, 8.

Gesenius had no special theory as to the Jerusalem Tsinnor. The word as used in the Psalm is rendered "waterspouts" in the A. V. It would hardly seem in that passage at least to apply to any underground channel.

Ewald appears to have given an extraordinary rendering of the passage—2 Sam. v, 8.—"Whoso smiteth the Jebusites let him hurl down the waterfall (or cliff)."

I have never seen the operation of hurling down a waterfall performed.

C. R. C.

KU FOR KING.

Professor Sayce's opinion carries weight, but I cannot admit that I was mistaken in saying that Mr. Pinches and Mr. Bertin consider *Ku* to be an Akkadian word for king. I have their letters still in my possession. The fact is that Dr. Sayce differs from not only Mr. Bertin and Mr. Pinches, but also from Lenormant, and Norris, and Fox Talbot, in denying the existence of this word. The matter is not of very great importance, since I have been able to show independently of Akkadian that such a word exists in Turanian languages with such a meaning. It would appear that what Professor Sayce calls a "makeshift" on the part of Norris was really a discovery.

The authorities who give this word were well aware of the existence of the word *anin* or *unan;* but because we have the word "monarch" in English this does not deprive us of the word "king."

C. R. C.

BIRDS AND ANIMALS NEW TO PALESTINE.

Among the 2,000 bird skins which I collected while in Palestine, from 1882 to 1886, there are several which, so far as I know, are new to that country, and hence they should be added to the list of those already known. Dr. Tristram's catalogue is the one followed, and to which the additions are supposed to be made :—

(1) Brambling—*Fringilla montifringilla.*

(2) Cuckoo, Lineated—*Cuculus leptodetus.* An eastern form of a West African bird.

(3) Curlew, slender-billed—*Numenius tenuirostris.*

(4) Duck, Golden eye—*Clangula glaucion.*

(5) Duck, Common Sheldrake—*Tadorna vulpanser.*

(6) Phalarope, Red-necked—*Phalaropus hyperboreus.*

(7) Plover, White-tailed—*Chettusia leucura.*

(8) Pratincole, Nordmann's—*Glareola melanoptera.*

(9) Yellow-ammer—*Emberiza citrinella.*

It may be of interest also if I make a few additions to his list, following the same order, chiefly as to the locality of birds. In two or more instances I was fortunate enough to obtain specimens which he has entered in his list, but which he did not obtain himself.

No. 6. Rock Thrush—*Monticola saxatilis.*

Tristram.—"It arrives in the beginning of April. South of Lebanon it is only a passing traveller tarrying but a night."

Addition.—It is true that it arrives in April, and in some seasons as early as March ; but to the last part of his statement I would

add that between the 10th and the 30th of September I shot several pairs in the immediate vicinity of Jerusalem.

No. 28. White-throated Robin—*Erithacus gutturalis.*

Tristram.—"Discovered it on Hermon and Lebanon."

Addition.—Near Jerusalem in August, 1885, I shot a fine specimen of the female of this species.

No. 30. Eastern Nightingale—*Erithacus philomela.*

Tristram.—"Not obtained by me in Palestine. It may be discovered there."

Addition.—I have three good specimens, one shot in August near Jerusalem, and the others shot in the Jordan Valley.

No. 68. Hermit Fantail—*Drymœca inquieta.*

Tristram.—"It is very scarce wherever found."

Addition.—I should say that it was quite common, for I saw it frequently on different journeys to and from the Jordan Valley. On this road I shot several specimens in November, also one near Jerusalem in September.

No. 90. Palestine Bulbul—*Pyonotus xanthopygus.*

Tristram.—"Never found in the hills or upper country."

Addition.—I shot several at Hebron, which is 400 feet higher than Jerusalem.

No. 94. Red-backed Shrike—*Lanius collurio.*

Tristram.—"Have not obtained it south of Esdraelon."

Addition.—I have shot specimens in the hills near Es Salt, also others in the hilly region between Jerusalem and the Plain of Sharon.

No. 109. Palestine Sun Bird—*Cinnyris oseæ.*

Tristram.—"Beyond the gorge of the Jordan I never but once found it, and that was at the south of Mount Carmel."

Addition.—This bird, or *a species* of Sun Bird, is abundant at Jaffa. The markings of those found in Jaffa differ from those found in the Jordan Valley, and I have shot them both in the spring and autumn at each of these places. Whether or not these are distinct species I do not now pretend to determine.

No. 111. Serin—*Serinus hortulanus.*

Tristram.—"Is only a winter visitor to the wooded districts and the little glens near the sea. It has not been noticed inland."

Addition.—In January and February, 1885, these birds were very abundant about Jerusalem, and at different times during those two months I shot a dozen specimens.

No. 113. Tristram's Serin—*Serinus canonicus.*

Tristram.—"Belongs to the Lebanon and anti-Lebanon exclusively. I cannot trace it on any of the spurs southwards, either from Hermon or Lebanon and there it is very local."

Addition.—On the 7th of March, 1885, I shot a beautiful speci-

men about half an hour distant from Jerusalem, near the Convent of the Cross.

No. 116. Hawfinch—*Coccothraustes vulgaris.*

Tristram.—"Only twice detected it, once in Gilead and once near Tabor."

Addition.—I have three specimens, one from east of the Jordan, and two from the neighbourhood of Jerusalem.

No. 139. Grakle—*Amydrus tristrami Sclater.*

Tristram.—"Appears to be confined to the immediate neighbourhood of the Dead Sea."

Addition.—This bird ascends the Great Wadies to a higher point than these words would seem to imply. In the upper part of Wady Farah, and in Wady Suweinit, not far from Mukhmas, I have frequently seen them in large numbers.

No. 167. Night Jar—*Caprimulgus tamaricis.*

Tristram.—"Only three specimens known."

Addition.—I have a beautiful specimen which I obtained at Jericho in December.

No. 193. Montagu's Harrier—*Circus cineraceus.*

Tristram.—"Not often come under my observation. Obtained three specimens by the Lake of Galilee."

Addition.—I obtained two specimens near Jaffa in November, 1885, and one in the Jordan Valley in April, 1886.

No. 197. African Buzzard—*Buteo desertorum.*

Tristram.—"This may probably be entered among the birds of Palestine, though I have never obtained a specimen."

Addition.—I have three good specimens, one of which was obtained near Mar Saba, and the others in the Jordan Valley. One of these was taken in December, and the others in April. As Dr. Tristram says that it has never been found in Palestine, I am glad to be able to bring it to the attention of the public.

No. 203. Booted Eagle—*Aquila Pennata.*

Tristram.—"Appears to be confined to the wooded regions of Galilee and Phœnicia, and to the Lebanon."

Addition.—I shot a fine specimen near Jerusalem in May, 1886.

No. 226. Pygmy Cormorant—*Phalacrocorax pygmæus.*

Tristram.—"Found on the Leontes and other streams flowing into the Mediterranean. I did not observe it on the Lake of Galilee."

Addition.—I obtained several specimens from the Jordan near Jericho.

No. 236. Little Bittern—*Ardetta minuta.*

Tristram.—"Plentiful in the rushes and reeds round Lake Huleh."

Addition.—Plentiful also on the Aujeh, near Jaffa, and on the Lower Jordan.

No. 237. Night Heron—*Nycticorax griseus.*

Tristram.—"Found in small numbers about Lake Huleh, and Gennesaret."

Addition.—Also on the Lower Jordan.

No. 251. Ruddy Sheldrake—*Tadorna casarca.*

Tristram.—"At the south end of the Dead Sea, and near the Lake of Gennesaret."

Addition.—They are just as abundant at the north end of the Dead Sea, and are found all along the Jordan.

No. 257. Garganey—*Anas circia.*

Tristram.—"I have not taken the Garganey myself.'

Addition.—I have four fine specimens from the Jordan, one of them shot in November, one in December, and two in May.

No. 294. Stone Curlew—*Œdicnemus scolopax.*

Tristram.—"Plentiful in the Ghor at the north end of the Dead Sea."

Addition.—I saw it frequently in the region about Mar Saba, and in the hills east of the Jordan. I have specimens from both these localities, and others from the vicinity of Beirut, as well as still others from the north end of the Dead Sea. I should say it was pretty evenly distributed over the country.

No. 296. Cream-Coloured Courser—*Cursorius gallicus.*

Tristram.—"Rare in Palestine Proper. I twice obtained it near Acre; also saw it in the southern wilderness, and on the upland of Eastern Moab."

Addition.—Very abundant between Jerusalem and Bethlehem on the Plain of Rephaim and south-east towards Mar Saba.

No. 305. Dotterel—*Eudormias morinellus.*

Tristram.—"Vast flocks near Beer-Sheba."

Addition.—I found them near Mar Saba in May, 1885.

No. 344. Manx Shearwater—*Puffinus Anglorum.*

Tristram.—"Obtained a dead specimen near Mount Carmel."

Addition.—I have two fine specimens, obtained at Jaffa in 1884.

I observed, during my residence of nearly seven years in Palestine, that there were great variations in the migrations of birds. Some years the land was full of them, and the next year, perhaps, there seemed to be very few. For example, I remember that for two years there were but few ducks anywhere in the southern part of the country; the next year, however, they were very abundant. What Dr. Tristram says of the dotterel, No. 305, may have been peculiar to that year. The same I know is true of my observation under No. 296, respecting the cream-coloured coursers. In other years, while found here and there, they were scarce; the year referred to they were abundant. The Arabs brought to our hotel large numbers of them for our table. Similar remarks would be true of quails, and of some other birds. Seasons vary in character and circumstances which we cannot explain, and may combine to cause these variations. As I have had occasion elsewhere to remark, this

is a study where there can be no monopoly of knowledge on the part of any single observer. Many observers are necessary, and each may add something valuable to the general fund of information.

As to animals, I may mention that I secured a fine specimen of the ratel or honey badger, *Mellivora ratel*, which was taken between Mar Saba and the Dead Sea ; also a pair of foxes, *Vulpes famelica*, small, delicate, with splendid brush. The most beautiful little creatures of the kind that I have ever seen. So far as I am aware these are both new to Palestine.

In his list of animals Dr. Tristram states of the coney, *Hyrax syriacus*, that it is "not known in Lebanon." A writer whose name does not appear, and who is unknown to me, in the "Edinburgh Review" for April, 1886, p. 326, speaks of the coney as "confined to the gorges of the Dead Sea and Arabia Petræa. It is rare in the rest of the country, and unknown in the Lebanon." The preface to Tristram's "Flora and Fauna" is dated in 1883, and the volume itself in 1884. But since 1876 I have had in my collection a fine large specimen of this animal, that was taken near the well-known Lebanon village of Abeih. Dr. Tristram's remark of the crocodile in the Zerka I would apply to this case of the coney : "An ounce of fact is worth a ton of theory."

Selah Merrill.

Andover, Mass., U.S.A.

THE INSCRIPTIONS OF SARIS AND MOUNT OLIVET.

It is very desirable that exact squeezes should be taken of the inscriptions described by Mr. Hanauer, as found in a cave at Saris, since the characters are evidently old Phœnician, the first one being an *aleph*. The sculpture accompanying them, moreover, is in the same style as the "Proto-Phœnician" rock-sculptures I have visited near Tyre.[1]

The inscription No. IV, given by Mr. Schick, which was found on the mosaic flooring at the Campo Santo on the Mount of Olives, reads : Χ[αίρετ]ε · μνήσθητι τῆς δούλης σου Ζάννας. "Farewell ! remember thy servant Zanna." In Egypt the first letter of the proper name might be identified with the Coptic letter н, and the name accordingly read Hanna, but this would not be possible in Syria.

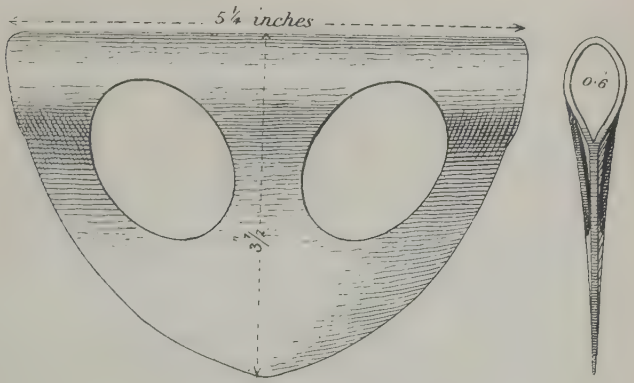
A. H. Sayce.

[1] Squeezes of this inscription have since been received by the Fund, and will be forwarded to Professor Sayce, who is now in Egypt.

NOTE ON ANCIENT AXE-HEADS FOUND AT BEYROUT AND SIDON.

By Rev. Canon Greenwell, *in a Letter to Prof. Lewis.*

In the *Quarterly Statement* for April, 1889, at p. 77, there is an engraving of a bronze axe discovered by Mr. Schumacher in a cave near Esh Shejara. It is evidently a Syrian type, based on a well-known Egyptian form. I have two out of four found near Beyrût, one similar and of the same



size as that engraved, and the other like the engraving above. The other two are smaller, but of the same forms. I have also another, found near Sidon, which is like the above figure, but not so large. Except these I do not know of any others, though such may possibly be found in some collection, public or private. These axes were certainly handled. The holes in the blade are, I believe, either for appearance or to lighten the handle. In one, the largest of mine found near Beyrût, portions of wood still remain in the socket; and the impression of the cloth in which it had been wrapped exists upon the oxidised surface of the metal.

JEWISH LAMPS.

Some time ago I was in Dorchester—a friend offered to show me the local Museum. The collection is varied and rich. I only wish to note what especially interested me. In a corner of a case were some lamps, labelled "Supposed Early British Lamps;" a moment showed me they were old Jewish, exactly like those from the excavations at Jerusalem. My friend the Antiquary, who had himself dug up many of the objects

of interest, told me these lamps came from "Maiden Castle," a grand specimen of a Roman camp, which I afterwards visited; it is quite close to Dorchester. History tells us that three Legions were camped here; and tradition has it that Jews—captives at Jerusalem, were sold by Titus to Phœnicians, and that these slaves made the fortifications. We know history tells that captive Jews worked in the tin mines of Cornwall; and as I looked on these lamps it did seem to me that the traditions were true, and that some poor Jews, slaves and exiles from their own land, had at one time worked here in this our England, and among their poor possessions they had clung to the old lamps.

H. A. Harper.

"THE WAY OF THE PHILISTINES."

I should like to call attention to a portion of the land between Palestine and Egypt, which would, I think, well repay skilful exploration. I mean the coast road, called in the Bible "The Way of the Philistines," across which that great wall of Egypt, with its towers and gates, must have stretched. While preparing notes for my book, "The Bible and Modern Discoveries," I was struck with the importance of this road, and also struck with the scanty information we have respecting it. Mr. Armstrong kindly showed me some large sectional maps of a portion of this road, and I was much interested in observing what a number of wells had been found in the portion surveyed. That there are "Tells," which mark ruined cities I know; and not many years ago the Archduke of Austria saw, in the street of the frontier town El Arish, an old Egyptian sarcophagus of black granite, covered within and without with very small hieroglyphics. It was there used as a water trough! On this very road the great armies from Egypt must have passed when they went on their way to invade Palestine. On this road Nebuchadnezzar and the other great invaders must have passed on their way to Egypt, and there must have been towns and settlements on the route—a fact proved by the wells I spoke of. True, I know, sand has driven in from the sea—but sand preserves ruins, and, it seems to me, that it only needs a skilful explorer, like M. Flinders Petrie, to have his attention directed to this "road," when I feel sure he would make many discoveries of interest, at very little cost both of time or money. We ought to know more of that land of Philistia, that we may get a clearer view of those people who were ever such bitter enemies to the Israelites.

Henry H. Harper.

NEHEMIAH'S WALL.

To all readers of the *Quarterly Statement* it must have been a foregone conclusion that the Rev. W. F. Birch would attack my paper on Nehemiah's south wall. He holds very confidently certain views of his own with regard to Jerusalem topography, and he is not able to see any probability in any others. For the benefit of perplexed readers he points out what he conceives to be the errors of my paper. May I be allowed in the interests of archæological truth to make some reply?

In seeking to restore the south wall of Nehemiah I have built upon a basis of fact, and have nowhere departed from probability. In carrying the wall round the southern brow of the modern Zion, I am only doing what most writers have done, and what Mr. Birch himself would do. He disputes its continuation along the eastern brow, up the Tyropœan, as far as the Causeway (or say the north wall of the Upper City). But this appears to be required by the statement of Josephus, that the Upper City had a wall of its own, going all round it. Apart from Josephus, it is inherently probable. Further, in adopting it I am only following Lewin, who gives reasons for it. I follow Lewin also in bringing a wall down the eastern side of the Tyropœan; I think with him that Josephus so describes its direction, and it seems to be required for the defence of Ophel, which received no protection from the eastern wall of the Upper City. Taking into account Sir Charles Warren's discoveries, which have been made since Lewin wrote his books, I assume that the wall last referred to joins the wall of Ophel, at the point where Warren found that wall to terminate. This arrangement localises the intramural "suburb," which I then have a short transverse wall to protect.

This bay up the Tyropœan is objected to by Mr. Birch as well as others. Instead of it they take the wall southward to the Pool of Siloam, and then northward along the eastern side of the Ophel hill. Their wall then does not and cannot effect a junction with the wall of Ophel, actually discovered. Moreover, it cannot be made to satisfy the descriptions in Nehemiah. The wall as I draw it does coincide with the descriptions of Nehemiah in almost every detail. In tracing the points of coincidence I am aided by Warren's discoveries, and I no longer find a guide in Lewin. That the coincidence should be so close is a strong presumption in favour of its truth, for the argument is cumulative, and it cannot fairly be put aside by such general considerations as Mr. Birch thinks it sufficient to urge. When Josephus speaks of the wall bending above the Fountain of Siloam, Mr. Birch takes him to mean southward, below Siloam, so as to include the Pool. He argues that Josephus must mean this because he speaks of the wall bending "thence again"—thence again from Siloam, says Mr. Birch; but why not thence again from the Causeway, after bending to go up the Tyropœan? As regards the Causeway, Mr. Birch allows that my plan is right, agreeing with Josephus, who

makes the Causeway part of the first wall. Whether the Causeway also joined Akra to the eastern hill is a detail, and Mr. Birch is quite wrong in saying that Warren's Akra is the basis on which I build. The question as between a wall making a bay up the Tyropœan and a wall making a sweep round the Pool of Siloam may almost be rested on the single fact that the first explains the omission from the route of the procession of so many places mentioned in the description of rebuilding (compare Neh. iii, 16–26, with Neh. xii, 37), and the second does not. It is to be noted that while Mr. Birch tries to find one or two weak points in my series of coincidences—coincidences between Nehemiah's descriptions and the line of wall in my plan—he does not attempt to make out that his own line of wall satisfies Nehemiah's description at all.

Mr. Birch is not solicitous to satisfy Nehemiah's descriptions, but rather to support one or two ingenious ideas of his own. He is confident that the wall did enclose the Pool of Siloam, because otherwise he, personally, would see no use in the rock-cut channel from the Virgin's Fountain, and he is sure that the wall of Ophel extended farther south and east than Warren found it to do, because otherwise Joab could not have found his way by the shaft from the Virgin's Fountain into the city itself, as Mr. Birch surmises that he did. That Joab entered the city in this way, aided by Araunah, is an ingenious guess; but it is only a guess, unsupported by any coincidence with any description in the Bible or elsewhere. Even if it be correct it militates against Mr. Birch's reasons for taking the wall of the city southward below Siloam Pool. For the passage if used by Joab existed in David's time, and since it afforded to the inhabitants of Jebus a means of obtaining water, even when the valley entrance to the fountain was blocked with stones and hidden from besiegers, there would be no necessity in Hezekiah's day to cut a channel through the hill for the like purpose. The supposition that Hezekiah cut this tunnel implies that he did not make Siloam Pool, for there was an open channel previously, which the rock-hewn tunnel was to supersede, and the open channel required the pool. The open channel being confessedly useless in face of an enemy, the pool which it supplied would seem to have been made for use in times of peace. But the open channel would only supply it when the water in the Virgin's Fountain rose so high as to overflow at its mouth in the Kedron Valley. It might be desired to bring it to the pool more constantly—for the same purpose as hitherto, whatever that purpose was—and one can imagine that the water ran through the tunnel when it would not have flowed by the open channel, not rising high enough. England is full of tunnels, excavated through hills and under rivers, but not at all with the purpose of hiding canals or railway trains from an enemy, and perhaps we should not make so sure that the purpose of the Ophel tunnel was to supply a besieged city.

Mr. Birch imagines that the city of David was confined to the Ophel hill. It seems to me that while the hill of Ophel was included, it was not of itself the whole of the city of David. Adopting Warren's Akra, west of the Temple, as the site recommended by what we now know of

the rock levels, and as suiting the references in the Books of the Maccabees and in Josephus, I think it possible that this was the fort which "held out still," after David had captured Ophel; but which he afterwards took, and joined it to the Lower City. The Akra thus became part of the Lower City; and this extended Lower City thus assumed a crescent form. Mr. Birch objects to my adopting the term *crescent-shaped* as a translation of Josephus's ἀμφίκυρτος. Well, the Greek word means doubly-curved, without specifying in what way; it might as well describe the gibbous moon as the crescent moon; but why not the crescent as well as any other double curve, especially when the local features of the ground seem to require it?

Mr. Birch further disputes the accuracy of some few details of my plan, and my accumulated coincidences.

1. He says that in Neh. iii, 19, 20, I make one "turning" count as two. Let him prove that it is only one. Again, the first salient angle of my plan is not mentioned in Neh. iii, and I show that there was no need to mention it, because the working party advances beyond it, and it is neither their *terminus a quo* nor their *terminus ad quem;* and in this connection I refer to the omission of the Ephraim Gate in Neh. iii, 6–8 "The Throne of the Governor beyond the river" comes in there instead; and it is obvious to every careful reader that this *may* be the same structure, or may be another structure *near* it. Mr. Birch tells us confidently that it is the same. Thus, he says, the Ephraim Gate is not omitted, and so my salient angle ought not to be. But the reason I have given is sufficient. On the next point I admit that Binnui comes *unto* the turning of the wall and *unto* the corner, and not simply *over against* them; but this would only require me to leave a trifle less space between Nehemiah's wall and the wall of the Temple enclosure.

2. In Nehemiah's description one builder takes up the work *after* another, and no doubt often at the point where the previous builder leaves off. Mr. Birch wishes us to believe that this was invariably the case, even where the next stretch of wall was not damaged, and again where diverging walls did not admit of it. I speak of Shallun repairing a transverse wall, branching eastward from the Fountain Gate, and of Nehemiah, who comes "after" him, repairing the wall from the Fountain Gate northward. Mr. Birch stands on the preposition, and cannot understand how the two men could begin their work at the same point. May I ask him simply to allow for a moment the possibility of the wall being as in my plan, and then to describe the succession of workers in some better phrase than Nehemiah does, if he can?

3. It seems unlikely to Mr. Birch that the transverse wall should be named from the Pool of Siloam, outside, and so far down the valley. Will he tell us why the Jaffa Gate is named after a town on the sea-coast and the Damascus Gate after a city in Northern Syria?

4. The bay of wall is pronounced inadmissible, because Mr. Birch knows that Nehemiah was too intelligent to fritter away the strength of the workers on a loop line of wall four times as long as the transverse

wall. But why not repair all the walls if there were workers enough? Owing to the previous building of the enclosing wall of the Temple, Nehemiah's wall, as I draw it, is pushed so far west as to be at one part very little above the valley bed; and Mr. Birch ridicules this. But it is to be observed that even this part of the wall is at no lower level than the wall of Ophel, discovered by Warren. A wall in such a position was the best that the circumstances of the locality admitted of, and was better than none. It could not be reached unless the transverse wall were taken first. Its position could scarcely be weaker than that of the north-west wall of the city, which actually has higher ground outside. Mr. Birch's alternative is a wall carried from the south-west hill, round Siloam, to the eastern side of Ophel; and *this necessarily crosses the valley*, and at a much lower level than the wall in my plan.

Finally, may I say that I have drawn a definite line of wall, and have correlated it at many parts of its course with points in Nehemiah's description; the argument is cumulative, and is not answered if one or two details be shown to be doubtful. Mr. Birch has not drawn his wall definitely, and could not make any wall going down to Siloam to tally with Nehemiah's descriptions. The Ophel wall actually discovered has no use on his theory, and apparently ought never to have been built. Further, comparing Neh. iii with Neh. xii, the processionists skip over a long line of wall repaired by the workers, and there is no way of disposing of it except by allowing the loop line as in my plan.

GEORGE ST. CLAIR.

THE WATERS OF MEROM.

I. Grounds for supposing that the waters of Merom (Josh. xi, 5, 7) are not the Lake Semechonitis of Josephus and the Bahr el Hûleh of the present day, and therefore that of this lake there is no mention in the Bible.

II. What was this "waters of Merom," and the locality of Joshua's victory over the northern tribes?

I. There appears to be no trace of the "waters of Merom" having been identified in ancient times with the Lake Semechonitis of Josephus; the Bahr el Hûleh of the Arab as far back at least as the Crusades. The district itself indeed in which this lake lies was known as the Ulatha in the days of Josephus. Ant. xv, 10, §3.

Such identification, therefore, rests at best on slender inference, and is destitute of satisfactory authority. But the name having been once thus assigned (at what time it is difficult to trace) it has been taken as correct, and handed on by one writer after another without enquiry or question.

Now it struck me in closely examining the maps of Western Palestine with Stanley's account of Joshua's battle with the northern tribes, that there were difficulties in accepting his localisation which could not be got over.

The following is a topographical description of the spot where he has placed the battle: "Owing to the triangular form of the lake a considerable space is left between the lake and the mountains at the lower end. This is more the case on the west than on the east, and the rolling plain thus formed is very fertile, and cultivated to the water's edge."[1] Now, on such ground, chosen as Stanley says, "because along those level shores they could have full play for their force of chariots," the approach of Joshua with his men of war from the south as he crossed the Wâdies, and especially the Wâdy Hindâj, must have been visible for long distances, and from numerous points. He could hardly have fallen upon them suddenly; whilst had his attack with footmen been in this open plain, it could not have proved the decisive success which we know it was.

Again, the line of flight from the scene of defeat, had it been by the shores of Semechonitis, could hardly have been to Sidon the Great. The tremendous ravine of the Leittâni (Leontes), and the stern ridge of Kŭlât es Shŭkîf on its northern side, would forbid escape in that direction.

Again, too, it is objected that the word for water in the original would not be used for a lake, but the word for "sea," as of Tiberias (*a*).

At all events the Septuagint constantly uses the expression "the water of"—always in the singular—to denote the stream running near some village, and named after it. Thus "the water of Megiddo," ἐπὶ ὕδατι Μαγέδδω (Judg. v, 19), for the upper reaches of the Kishon River; or again, "the water of Nimrim shall be desolate," "the water of Dimon shall be full of blood" (Isai. xv, 6 and 9), and so in other passages.

That is the Afon, Adwr, ῥύδωρ, running near a town or village and borrowing its name from it, is what is meant by the expression "the water," τὸ ὕδωρ, and not a lake.

On such grounds then, it is unlikely that the Bahr el Hûleh is meant by "the waters of Merom;" and if so, there is no reference to this lake in the SS.

Indeed, the very existence of the name Merom here may be nothing more than a mistaken reading.

II. What then may more probably be the site of Joshua's third great final victory?

Now, in reference to the Septuagint we find that one of the kings to whom Jabin, King of Hazor, sends, is not Jobab, King of Madon, as it stands in the Authorised and Revised Versions (Josh. xi, 1); but Ἰωβαβ βασιλέα Μαρών. So, too, in verse 5 it is said all the kings παρενέβαλον ἐπὶ τὸν ὕδατος Μαρών, and not Merom. So also, verse 7, that Joshua with his warriors came upon them ἐπὶ τὸ ὕδωρ Μαρὼν at unawares, and fell upon them "in the mountainous country," ἐν τῇ ὀρείῃ.

Where, then, are we to look for this stream of Maron?

[1] Smith's "Bib. Dict.," s.v, Merom.

Josephus informs us (Ant. v, 1, §18) that "the kings pitched their camp at Beroth, a city in the Upper Galilee not far from Kadesh, itself also a place in Galilee."

Now, south of Kadesh runs a ravine with a perennial stream from the central watershed to the foot of the Bahr el Hûleh, bearing at the present day in its downward course the names of Wâdy el Jish (Gischala), W. Fârah, W. 'Aûba, Tawahîn el 'Aûba, and lastly, Wâdy Hindâj.

To the north of this stream lay the towns of Hazor (over the Lake Senechonitis (Joseph. Ant. v, 5, §1), and then the head of all the kingdoms), Kadesh, Iron, (Josh. xix, 37), and perhaps, taking the reading of the Septuagint, Mârûn; for of these, Iron is probably the present Yârûn; and Μαρὼν, Mârûn er Râs, about 2½ miles from the ravine, but dependent on its stream for water; if, indeed, the addition, er Ras (*b*) does not point to the existence once of a Mârûn lying on the lower ground, and perhaps coincident with Fârah.

Along this ravine, for the water's sake, lay, I imagine, the gathering hosts of the northern confederacy, somewhere about the part which bears now the name of Fârah.

Thus, too, they would have their store cities behind them, as they were organising their bands to sweep down against Israel across Esdraelon into central Palestine. But as they lay in fancied security near to water, and in the crowded valley, by (*c*) a forced march of five days (Josephus, Ant. v, 1, §18) from Gilgal (Josephus and our versions, but not the Septuagint), Joshua and all the people of war fell upon them like a thunderbolt in the rocky ground (Septuagint) where their chariots would be useless.

Struck in the centre their army was broken asunder by the impetuous charge. Then the Israelites, facing westward and eastward on their flanks, would roll up their enemies in hopeless rout. Only at one point perhaps was a stand made; on the crest of the watershed at Kefr Birîm, *i.e.*, "the village of wells;" surely the city of Beroth, *i.e.*, "of wells" of Josephus. But the struggle was short. Led on, it may be by the mighty Caleb, the left wing of the Israelites drove their foes headlong down the tortuous valleys that at over twenty miles away open upon the road which, coming down from the Ladder of Tyre and north of Râs el Abiad, ran along the coast to the fords of the Leittâni, to Misrephoth-maim (Zarephath) (*d*) and Sidon the Great.

Eastward Joshua himself seems to have led the pursuit, perhaps between Kadesh and Hazor, cutting off the main body from their cities and driving them before him till he reached the valley of Mizpah eastward, under the roots of Hermon, whence the Hivite had descended to range himself under the banners of Jabin. Then, when the pursuit ceased with the slaughter of the last of the overtaken fugitives, Joshua turned back and took Hazor "and smote the king thereof," feebly defending it with the remnant of his host "with the sword." "And they smote all the souls that were therein with the edge of the sword, utterly destroying them; there was not any left to breathe, and he burnt

Hazor with fire." And Hazor only. As it was done to Jericho in the south, so was it done to Hazor, the head of all those kingdoms in the north.

Such I suggest as the probable site of the battle, the course of the fugitives, and the final result.

Thus, it seems, may be best brought into unison the narratives of the Hebrew, the Septuagint, and Josephus.

NOTES.

(*a*) The Hebrew word *Me* is not that commonly used for a large piece of standing water, but rather *Yam*, "a sea," which was even employed for so small a body of water as the artificial pond or tank in Solomon's Temple: Smith's "Dict. of Bible, s. v, Merom."

(*b*) As Râs el Akra on the hill and Akrabeh (Ekrebel, Jud. vii, 18) on the lower ground.

(*c*) This march could hardly have been from Gilgal in five days, for the distance, as the crow flies, is 75 miles.

(*d*) An objection to identifying Misrephothmaim with Zarephath might be, that it is named after Sidon in the description of the flight, whereas it would be reached on the way to it. Granting this, it would come in order as belonging to the eastward route of flight. Symmachus, says Eusebius, interprets it as Misraipoth of the sea. May it then be a place near the northern part of the Lake (Sea) Hûleh?

WILLIAM GOVER,
Hon. Canon of Worcester.

SALTLEY LODGE, WORTHING,
December, 1889.

APPENDIX A.

MERRAN (Merrom, Jerome).—Eusebius (whose Onomasticon with Jerome's translation I have had the opportunity of examining in his ample library through the kindness of my neighbour, Major Gaisford, of Offington) regards this village as the site of the battle. He describes it as twelve miles' distance from Sebaste (Samaria), and near Dothaim (the two cisterns?).

If so, the waters of Merom (Merran) must be the Brook Mochmur in the plain of Dothaim, south of the Carmel ridge, now known in its higher parts as the Wâdy es Selhab, and as the Nahr el Mefjir at its debouchement into the Mediterranean. But this point is fifty miles distance from Hazor and Kedesh, and such localisation can in no way be made to cohere with the precise narrative in Joshua of the lines of flight.

Meiron.—So much could not be said against a conjecture that should place the site of the battle near Meiron, about three miles south of El Jish (Gischala), with its wâdy running from west to east till it joins the larger Wâdy et Tawahîn near the western foot of the hill on which Safed stands. Yet even so, if this were the site the western line of flight would surely be the shorter route south (not north) of the Ladder of Tyre and the Râs el Nâkûrah, to the friendly cities of Accho, Achsaph, and Achzib, while the eastward would seek the fords of the Jordan below Lake Hûleh.

The examination, therefore, of both these alternatives tends to confirm the correctness of the supposition which places the site of the battle near Maroon and Kefr Birîm.

APPENDIX B.

Eusebius' Onomasticon ; Jerome's Liber de situ, &c., Joshua.

Eusebii Hieronymi Opera, Tom. III, p. 243. Editio Vallarsii, Veronæ MDCCXXXV.

Μερρὰν, ἐπὶ τὸ ὕδωρ ἔνθα παρέβαλον εἰς πόλεμον. Ἔστι νῦν κώμης μέρος Σεβάστης ἀπέχουσα σημείοις ιβ', πλησίον Δωθαείμ.

Merrom.—Aquæ ad quas exercitu præparato castra sunt posita. Est autem nunc vicus Merrus nomine in duodecimo milliario urbis Sebastæ juxta Dothaim.

Μαρὼθ, καὶ ταύτον εἶλεν Ἰησοῦς, τὸν βασιλέα αὐτῆς ἀνελών.

Marom.—Et hanc cepit Jesus, rege illius interfecto. (Posita est et supra Marrus.)

Μαστραιφὼθ μαίμ. Α. μαστραιφώθ ὕδατος, Σύμμαχος Μαστραιφώθ θαλάσσης.

Massephoth maim : pro quo Aquila Massephoth aquæ ; Symmachus, Massephoth maris, interpretati sunt.

NOTE ON GREEK INSCRIPTION.

Allow me to suggest that the inscription No. 4 on Plate at p. 183 of the last (October) *Quarterly Statement* should be read as "the Memorial (ΤΗC DOUλHC COUZANNAC) of the servant [minister] Susanna, not Anna, as rendered in the note, p. 179.

In Luke viii, 3, Susanna (Σουσαννα) was one of the women who "ministered" (διηκανουν) unto the Lord "of their substance."

Have we here a Hebrew (Christian) memorial of mosaic, wrought in

memory of one belonging to a wealthy family? It is to be remembered that the names of Martha, Eleazar (Lazarus), and Simeon were found by M. Clermont-Ganneau on the other side of Olivet, "close to the Bethany road and very near the site of Bethany" (*Quarterly Statement*, January, 1874, pp. 7–8), in Hebrew inscriptions on small sarcophagi. In the Greek inscriptions which he found at the same place Σ is represented by C. This is also the case on the Judeo-Greek inscription found by M. Clermont-Ganneau at Jaffa (*Quarterly Statement*, April, 1887, p. 106), and in the inscription found by my husband, Mr. Finn, near Aceldama.

E. A. F.

IRRIGATION AND WATER-SUPPLY IN PALESTINE.

Mr. Harper, in his capital book, "The Bible and Modern Discoveries," touches on a matter which may perhaps throw some light on the water-supply and irrigation in Palestine. I do not feel quite sure of the conclusion to be drawn from the descriptions given, but I judge as well as I am able in this, and leave the subject till further information turns up. At pp. 11-12 Mr. Harper quotes first from Dr. Merrill, of the American Survey, who reports having seen rows of pits, in the Vale of Siddim, and "counted in one place a row of 31, and in another row, 20; they are from 3 to 6 feet deep, and he says more can be traced." Mr. Harper also received an account of these pits from the Rev. J. Neil, who visited them before Dr. Merrill. According to him the pits are about 6 feet deep; then there is a deep shaft or well; "this well is connected with the next pit by a tunnel, so that when that well is full it overflows into the other pit, and so on through the whole series, every pit having a well. The first pit being on higher ground would catch the rain-water from the hills, and when the well was full the water would pass into the next by the tunnel, and so the whole row would be filled, and a good store of water secured." It is also stated that similar pits exist near Kŭrn Sŭrtŭbeh, and that "near Damascus the same arrangement for storing water may be seen in working order."

From these descriptions I would say that this is the same system of water supply that exists at the present day in Persia and Afghanistan, and is still in "working order" about Damascus. The pits with the tunnel connecting them form what in Persia and Afghanistan would be called a *Karaize*, but either the gentlemen who have described the pits in Palestine have not understood them, or they may be partly destroyed, and owing to this the accounts do not make them quite agree with the *Karaize*. Hence there is some uncertainty as to identity. Still, the leading points are so similar that I have little doubt but they are the same. I shall here give an idea of the *Karaize*, so that it may be com-

pared by travellers with the remains in the Vale of Siddim, and with the system still working near Damascus. In Persia land is of little value, but a supply of water is wealth. In many parts streams are scarce, and it is by means of the Karaize that water for irrigation is found. In the part of Persia that I journeyed over with the Afghan Boundary Commission—that is, in a line east from Tehran—these works exist everywhere. There are men whose profession it is to find out a source of water below ground near the foot of the hills, and when this has been discovered there are men who will make the Karaize. They dig a series of pits, about, perhaps, twenty or thirty feet apart, and to a depth which depends upon the soil and the level of the Karaize. These pits are not wells; they are only the means by which the tunnel through which the water is to flow is made. This subterranean aqueduct extends from the source to the point where the water is required, and there it flows out, cool and clear, for the use of a village, but principally for the irrigation of the fields. The pits are kept open, so that the men can go down at any time to clear out or repair the tunnel. The pits and the connecting tunnel below, described by the Rev. Mr. Neil, so exactly resembles a *Karaize* that I can scarcely doubt the character of the remains in the Vale of Siddim; but Mr. Neil describes the pits as wells, and ascribes to them the purpose of storing a supply of water. Now, this is exactly what would result in a Karaise if the lower end of it was destroyed, so that the water could not escape. It would accumulate and fill up the pits. Of course I only give this as a guess, and leave it for further investigation.

If the suggestion here made should turn out to be a correct one, it will have an interest in many ways. It will show that a system of water supply has extended in the past from Palestine eastwards as far as the Khyber, where I first saw a Karaize. In the Jellalabad Valley they are numerous—and at Heda, an ancient Buddhist site, there are the remains of one tunnelled through the rock,—showing that this method of supplying water is of great antiquity. If the pits in the Vale of Siddim should ultimately be accepted as the remains of a Karaize, the "ditches," referred to by Mr. Harper, 2 Kings, iii, 16, will most probably have been the same. By throwing light on the water supply of Palestine it will explain to a certain extent the curious problem as to the former fertility of the Holy Land, with which the existence of a large population, and extensive cities, are connected. I have seen a large stream flowing from a Karaize in Khorassan, beyond which there were no other indications of water in the locality. Without this supply the place would have been a desert; by its means a number of villages existed. I have read somewhere that the Valley of Nishapur in Khorassan was at one time called "The Valley of twelve thousand Karaizes,"—an Oriental exaggeration no doubt,—but then the valley at that time was fertile and populous, and Nishapur was a great and celebrated city. I mention these facts to show how this particular system of water supply was related to fertility and population in one part of the world; and if it existed in Palestine, it will be a sufficient explanation of the same conditions.

If the arrangement which is said to be in "working order" at Damascus is similar to the *Karaise*, we need have little doubt but the system existed in Palestine. I have never been to Damascus, but many persons have, and it is to be hoped that some one will be able to tell us what the system is at that place. In the *Quarterly Statement* for 1881, p. 38, there is a mention of an underground stream, "which, rising near Hebron, runs southwards to Beersheba, and thence westward to the sea, passing by the site of Gerar." In the *Quarterly Statement* for 1873, p. 149, and 1876, p. 121, will be found notices upon the water supply of Palestine.

To the author of "The Bible and Modern Discoveries," as a "Brother Brush," I beg to convey my congratulation on his production, and wish the book every success, which I am sure it will receive.

WILLIAM SIMPSON.